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ONE of the cleverest but most caustic criticisms of the dilatory tactics of Congress on the tariff has been issued by the Mansfield, O. *Sun* under the title of "What Congress Has Done on the Tariff." The handsome covers with the advertisement of the newspaper enclose a few sheets of plain blank paper. The point of this criticism remains keen. Action is still delayed. The Senate has acted upon the chemical schedule, however, and there seems to be some hope of ultimately reaching a vote.

THE coal strikes have resulted in a great scarcity of coal and all manufacturing industries are beginning to feel the effects of this. There seems every probability that a general advance in glass ware will follow, and we would advise our readers to close contracts for their supplies of bottles, etc., as soon as possible.

IN last week's issue a printer's error made us say *Europe* was represented in the list of honorary members of the Pharmaceutical Society of Great Britain by Professor ATTFIELD. Every one, of course, is aware that ATTFIELD is *England's* foremost pharmaceutical chemist, but the English pharmaceutical journals are touchy on matters of this kind, hence the correction.

ONE of the queries proposed by the Georgia Pharmaceutical Association as reported in the newspapers reads: "Valerian and why is it Antidoting?"

This query, it is announced, has been accepted by R. L. TYE. Pharmacists, we apprehend, will be as much interested in knowing *where* it is antidoting and at whose instigation?

The funny side of the query has had its effect on our poetical editor who sends in the following:

Pray tell us why
Dear Mister Tye
Valerian is antidoting?
And where and when as well as why?
And which and how we weakly cry;
Wherefore, whattor,
Whichway, howcome,
Of knowledge we would have the sum,
Why is valerian antidoting?

SPRING trade or what should have been the spring trade is a thing of the past, and of a somewhat disappointing past, it must be confessed. The summer dullness will probably not be more pronounced than usual and with the aid of the soda counter and of the usual demand for summer specialties will no doubt turn out at least fairly satisfactory. The excellent crop prospects and the dawning hope that the tariff matter may be settled by that time give grounds for anticipation of a prosperous fall season. Eras of depression such as we have been suffering from for the past two years are rarely of such long duration as is the present epoch and are invariably followed by a reaction toward an easier monetary condition.

DELMONICO'S has been selected as the place and the first week in October as the time for the meeting of the National Wholesale Druggists' Association in this city. The first business session will be held on Monday evening, October 1st, and the last on Friday. The committee was influenced in selecting the date by the fact that on the following week the annual meeting of the National Paint, Oil and Varnish Association will be held in Boston, and it was thought that out-of-town members would like to attend both conventions on the same trip. Details will be arranged later, and the composition of the committee is sufficient guarantee that all who attend will have an enjoyable time. JOHN M. PETERS is chairman and THOS. P. COOK secretary; their associates are WM. HULL WICKHAM, BRENT GOOD, THOS. F. MAIN, B. T. FAIRCHILD and W. H. SCHIEFFELIN.

REFORMS NEEDED IN THE TREATMENT OF THE INSANE.

THE *New York Herald* is at present putting forth strenuous efforts to bring the existing condition of affairs in the City Insane Asylums to the attention of the Grand Jury. It claims to have made out a clear case of mismanagement against the asylum authorities; and some of the stories told are certainly revolting enough to warrant immediate action by the District Attorney.

Some of the evidence brought forward by the *Herald* in support of its charges would seem to indicate that a mistake had been made in abolishing the use of the straight-jacket as a means of controlling the fury of patients suffering from acute mania; for it is charged that physical restraint of this kind has been replaced by the use of hyoscyamine and chloral, drugs which stupefy and render unconscious the persons to whom they are administered. The *Herald* is wrong, however, in laying the blame for the alleged inhuman treatment of the city's insane poor on the medical officers in charge. No one who is in the least familiar with the management of the City Asylums for the Insane would think of blaming these gentlemen. The blame clearly rests with that curious body known as the Commissioners of

Public Charities and Correction, and if the *Herald* is really anxious to ameliorate the condition of New York's insane it should urge the Legislature to divorce the Department of Public Correction from the Department of Charities and institute a new commission in lunacy to have supervision over the insane poor of the city and county of New York.

NEWSPAPER POSTAGE.

THERE has been in progress an agitation looking toward a material advance in the rates of postage on second class matter which embraces all periodicals.

The cause assigned for the agitation lies in the postal deficiency, which really is only apparent. While it is true that the receipts of the postal service do not balance the expenditures, the discrepancy is due to the fact that the post-office department is compelled to transport enormous amounts of matter for other government departments for which service it receives no credit whatever. Therefore when Congress is called upon to make up a deficiency it is in reality only asked to pay this department for the services rendered to other departments of the public service.

If all the official letters, books, pamphlets, seeds, etc , which passed through the mails last year under the franking privilege had been charged for at the same rate as private mail matter there would have been an income therefrom of $7,173, 364, which would more than make up the so-called postal deficiency.

The rates of postage on periodicals was made low on two grounds, the first being that the newspaper press is in the nature of a public educator and that in fostering their growth the government is aiding the cause of public education. That this theory is a sound one must be admitted by all who give the matter adequate attention, for, however much and however justly we may inveigh against the sensationalism of the modern newspaper, we must admit that it is a powerful factor in the elevation and education of the masses.

The second factor in the case is the very small cost of handling this matter as compared with that of handling other mail matter, it being stated by competent experts that the cost of handling newspaper mail is but one-fortieth that of handling first-class mail.

A change has been proposed involving the payment of eight times the present rate on second class matter. If this change is made the readers and not the publishers will be called upon to pay the difference, for every publisher will be compelled to advance the subscription price of his paper sufficiently to cover the increased cost of the postage.

On the grounds above cited we believe that any change in the rate of second class postage would be to the detriment of the best interest of the public and feel confident that the really public-spirited citizens of the country will exert their influence with Congress to prevent any legislation in this direction.

OPIUM AND THE TARIFF.

THE importance of the speculative movement in opium can best be understood by taking into consideration the quantities which have been moved presumably in the furtherance of that deal. The value of the total imports of crude opium into the United States for the nine months ending March 31, 1893, was $661,366, while for the corresponding period ending March 31, 1894, the value of opium brought in was $1,258,045, or nearly double the quantity for 1893. The significance of these figures is enhanced when the fact is borne in mind that during the corresponding periods the total value of the importation of drugs into the United States, including opium, has decreased some twenty-four per cent.

That stocks of opium are being accumulated here is still further shown by the fact that whereas there has been a slight increase in the exports of foreign drugs from the United States during the past nine months over the corresponding period of 1893, opium is a striking exception, the value of the exports of that drug for the period under discussion having amounted to but $1,477 in 1894, as compared with $10,457 for the same nine months of 1893.

During this period also the domestic consumption has been decidedly below the average, as will be shown by consulting our weekly market reports.

Another significant fact is that during the month of March, 1894, alone $609,008 worth of opium was imported, whereas during the nine months ending March 31, 1893, the total imports amounted to but $661,366.

It will be clear from this that if a duty of one dollar per pound been imposed on opium the persons who had imported and are holding it would have made an enormous profit.

The action of the Senate, however, in putting opium back on the free list spoils a very pretty piece of speculation. Now comes news of better crop prospects and lower prices in Smyrna, which seem to give promise of a still lower range of prices, so that it seems probable that the speculators will meet with an actual net loss on their purchases as well as lose the prospective profits which they had reckoned upon on going into the deal.

THE SOCIETY OF CHEMICAL INDUSTRY.

A NUMBER of the American members of the Society of Chemical Industry of London met in the College of Pharmacy last Tuesday and discussed the advisability of forming a local section of the association in this country. It would appear that American members who are manufacturing chemists or engaged in industrial chemistry are debarred from the benefits obtained by members in England, who meet at stated intervals and discuss subjects of interest to technical chemists. Some of the F. I. C. S.'s who are familiar with the proceedings of the American Chemical Society are of opinion that that body does not give sufficient attention to the needs of the technical chemist, and it is represented that the *technical* chemist as distinguished from the *scientific* chemist can derive no benefit from membership in it Then, too, it is charged that the American Chemical Society is ruled too much from Washington, the impression conveyed being that the society is little more than a government bureau. This is something which, of course, can only be remedied from the inside. There seems to be a field for the establishment of a local section of the Society of Chemical Industry in this country, and it is to be hoped that the council of the society will see it in the same light. A list of the American members of the society is given elsewhere in this issue.

THE COMING MEETING OF THE A. P. A.

WE present elsewhere in this issue some interesting data concerning Asheville, N. C., the place selected for holding the next meeting of the American Pharmaceutical Association. While the time of meeting is still distant, we thus early call the attention of our readers to the subject, so that the attractions of Asheville and of the A. P. A. meeting will be taken into consideration when planning the summer outing.

The review of the Proceedings of the Association, which appears on page 281, will give to those who are not already members of the association some idea of the value of this annual report as a work of pharmaceutical reference. The possession of this volume alone is well worth the cost of membership in the association.

This is, however, the least of the benefits accruing from membership in this body. Its meetings each year furnish at once a delightful recreation and an opportunity for intercourse with the most progressive minds of the pharmaceutical world.

Queries Proposed by the A. P. A

The scientific section of the American Pharmaceutical Association has proposed the following additional queries as subjects for papers for the Asheville meeting:

Give the easiest method of identifying pure olive oil.

What aloins are at present found in commerce and what is their source?

How can retail pharmacists economically recover the alcohol from drugs exhausted by percolation?

How does acetic acid compare with alcohol as a menstruum in exhausting drugs for extracts or alkaloids?

How does acidimetric analysis compare with the use of Mayer's solution for estimation of alkaloidal salts?

Give the best method of subduing or avoiding emulsion in assaying alkaloidal drugs.

Written for the American Druggist and Pharmaceutical Record.

EXTRACTUM CARNIS HUMANA.

By William B. Thompson, Phil delphia.

The use of exsiccated substance of animal glands, powdered, as agents in therapeuty, would seem to be based upon the Hahnemanian theory of "*Similia Similibus*" The sound flesh of a healthy organ being availed to correct the diseased state of a similar organ. It is certain we shall always have enthusiasts enough to adopt new remedies, and it does not seem to signify how inconsistent, or incongruous the principle may appear, yet there will be early followers and believers. Before conclusions are accepted, however, observations should be made wisely and results, where traceable, explicitly and accurately stated. In time we should at least have information the accuracy of which can reasonably be questioned or confirmed by investigators who are always prepared to take up scientific work upon reliable data.

One of the applications of glandular extract which seems to have received more than usual notice is that of the" Thyroid." This is applied to the treatment of goitre, and to that condition which supervenes, or is an accompaniment to it," Cretinism." Some facts of information in regard to the latter can now be revived for the benefit of those who may not be familiar with it. Physical, mental and moral degradation can hardly be sunken to a lower level than that to be observed in the Cretins of Valais, and the Blafards. These creatures are *deaf*, *dumb* idiots almost insensible to blows, and have "goitres," or swelled necks, sometimes enormously pendulous, descending to the middle of the body. They are neither furious nor mischievous, but absolutely foolish and incapable of thinking. They only experience a sense of physical want, and are excessively fond of all the pleasures of sense.

The inhabitants of the Valais regard these Cretins as saints, and tutelary angels; those who have them not in their families think themselves seriously at variance with heaven. The Cretins have a very livid skin: they are born stupid and imbecile, and remain so until death, unless a remedy can be administered to their physical and moral state. Such is also the case of the Blafards, whose stupidity is equal to that of the Cretins, and if they are not entirely deprived of the gift of speech they are so much the more maltreated, as regards the senses of sight and hearing. These persons are condemned by the structure of their eyes to shun the light like owls. They are very weak; their height rarely exceeds four feet five inches; their complexion is of a pale white, the color of linen, or white wax, without any shade of carnation, or red; small, gray, lenticular spots are sometimes distinguished on them; they have no beard; in Africa their hair is wooly, and frizzled, in Asia long, and straight; their eyebrows and lashes are silken, and their eyes are formed like those of partridges. These unhappy beings terminate their sad career at the age of about thirty years, having merely existed, not lived. They are principally met with about the center of Africa, at the extremity of Southern Asia, in the islands of the south, and at Darien in the New World.

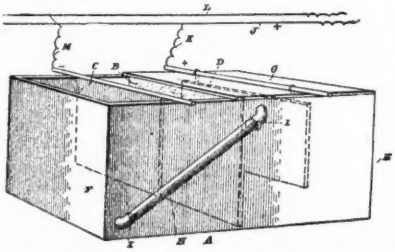
We have no such positive cases, as above described, however, to come under observation in this country, but quite numerous instances of "goitre" are met with in practice,, and it is upon the latter, we presume, that the virtue and effect of the new agent, and the principle involved will be demonstrated. There is already some evidence proffered, but would it not be wise, for the present, to receive this "*Cum grano salis?*"

Written for the American Druggist and Pharmaceutical Record.

MANUFACTURE OF CHLORATES BY ELECTROLYSIS.

By Henry Blumenberg.

The production of the chlorates has been up to the present date invariably made by leading chlorine gas through a warm saturated solution of an alkali Various improvements have been attempted and brought forward. One of the earliest was that of St. Romer of Vienna (1821) by leading chlorine gas into a chamber containing a carbonate of the alkali for a fixed period, then heating, and later on subjecting the same to a lower temperature; or, in other words, cooling it. The chamber was opened and cakes of potassium chlorate removed. This was afterward freed from the chloride by re-crystallization.



APPARATUS FOR THE MANUFACTURE OF CHLORATES BY ELECTROLYSIS.

FIG. 1.

Another process was brought forward by M. Vee which was analogous to the one brought forward by Baron Liebig, which consisted of heating a solution of calcium chloride and water in a retort and then adding a sufficient quantity of potassium chloride to raise the temperature and also the density of the solution. Special care was, however, taken that the solution did not boil by the liberation of oxygen. The concentrated liquor was set aside in a cool place where a deposit of chlorate was formed mixed with a percentage of chloride, which was eliminated in a second crystallization. The mother liquors were concentrated so that any chlorate contained in them was deposited.

The processes being used at the present date are only improvements on the above, milk of lime being submitted to the action of chlorine in a heated state and resolved into chlorate and calcium chloride. To the above, which must be in a concentrated state, potassium chloride is added, the following reaction taking place $Ca(CLO_3)_2 + 2KCL = 2KCLO_3 + Ca\,CL_2$.

There are minor details in practice which vary in different places, such as mixing milk of lime and the potassium chloride and then submitting the chlorine in presence of one to the other.

Another process was brought forward by W. Weldon by which he substitutes magnesium chloride in place of lime, which can be constantly regenerated by roasting and leading a current of dry steam over or through it. This gives a by-product, namely, hydrochloric acid.

As I have given the various ways and processes that have been tried for the production of chlorates by direct chemical means, mainly, as can be seen, by artificial products, I will take the liberty to give some of the latter processes by electro-chemical means and natural products, namely, the chlorides of the metals of the alkalies and alkaline earths.

It may be said that Gautherot was the first who electrolyzed a salt solution (1801), followed closely by Ritter, Volta, Marianni and later on by Becquerel. Hisinger and Ranzelius observed that when an electrolyte consisting of sodium chloride is electrolyzed with silver electrodes hydrogen gas is evolved at the cathode, and later on chlorine at the anode. The anode also becomes covered with silver chloride. The liquid near the anode contains chlorine and around the cathode soda is found.

Higgins and Draper also observed that chlorine was set free at the anode and hydrogen at the cathode.

Mattiessen later on electrolyzed a fused mixture consisting of potassium and calcium chlorides and observed that chlorine was liberated at the anode and potassium accumulated around the cathode.

Davy had before this in 1807 made his immortal discovery of the metals of the alkalies. This caused the above experiments to be carried out thoroughly, but the facts as to the secondary results, the influence of electrolytic oxygen in the nascent state, were mainly brought forward by Daniell. Smee, Miller, Becquerel, Faraday and Kolbe.

Kolbe states in his admirable work on inorganic chemistry that if a concentrated solution of potassium chloride is electrolyzed by a powerful electric current, using platinum electrodes, the nascent oxygen which is set free at the positive pole oxidizes the potassium chloride to chlorate. Again we have another article written by Prof. Kolbe, which was reviewed by Prof. Miller, who states as follows:

> Many of these secondary actions are very interesting. Kolbe has devoted particular attention to the effects of oxygen when liberated during electrolysis of an acid solution of potassium chloride. Chlorate and chloride of potassium were invariably formed. Then again in reference to the nascent state of bodies it is obvious from the powerful effect which oxygen produces at the moment of liberation from compounds during electrolytic decomposition that such oxygen must be in a condition very different from that in which it exists when once it has assumed the gaseous form. Oxygen is not insoluble in water, and it is therefore possible to bring it in small quantity at a time into chemical contact with salts or other bodies which water may hold in solution. Oxygen gas may, however, be transmitted for an unlimited time through a solution of chloride of potassium without effecting the conversion of any portion of the chloride into chlorate, or into per chlorate of potash, and yet as has been mentioned in the foregoing paragraph this change is easily effected by oxygen as it escapes during the electrolysis of an acidulated solution of the chloride of potassium.

Now, it may look very peculiar that with all these various experiments that were carried on they were never carried to actual practice, the cause being the excessive cost of producing electricity in that time which has now been overcome, and also the very small yield of chlorate.

Various makers will now guarantee a commercial efficiency of 95 per cent. of their dynamos, and even with this guaranty there has not with but few exceptions been any success achieved in this direction, the reason being that the amount of chlorate produced was so small that there was actually no margin for profit The experiments of Kolbe and Miller demonstrated only from a scientific standpoint what could be done, but what has been achieved has not been told.

The production of chlorates as referred to by Kolbe and Miller can never with our present knowledge be carried out practically. Of this I am firmly convinced from actual experiments.

The electrolyzation of chloride of potassium as carried on by the named professors

without having their electrolyzation vat divided into electro-negative and electro positive divisions may look very feasible from a theoretical standpoint—namely, in the amount of electric current used and also the lower resistance, but in practice cannot be compared with the processes of Gall and Montlaur, Franchot and Gibbs, and processes of my own.

I do not mean to say that there is not enough chlorate produced by the processes or experiments of Kolbe and Miller; but a very large percentage is reduced by the liberated hydrogen, also by the electric current under some conditions, and these disadvantages prevent us from realizing practically anywhere near the theoretical yield.

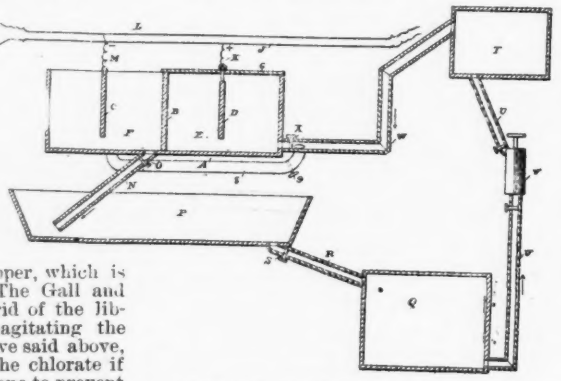
The above disadvantages have prevented almost to the present date, with the exception of a few cases to my knowledge, the production of chlorate by the electrolyzation of a chloride.

The exceptions are those which were enumerated above—the processes of Gall and Montlaur, Franchott and Gibbs, and processes of my own.

The Gall and Montlaur process seems to be the pioneer in the production of chlorate in actual practice. Having their plant erected in Switzerland—presumably near some waterfall—they are producing the chlorate from a chloride at a considerably lower cost than the chlorates produced by direct chemical means. The Franchott and Gibbs process of which we have heard very little lately has the advantage of getting rid of the hydrogen by chemical means, namely, in reducing an oxide of copper, which is the negative plate. The Gall and Montlaur process gets rid of the liberated hydrogen by agitating the electrolyte; for, as I have said above, the hydrogen reduces the chlorate if there is not something done to prevent it. In these processes of Gall and Montlaur and of Franchott and Gibbs and in my own we depend solely, after the chloride is electrolyzed, on recombining our acid and basic radicals in producing the chlorate, and of course the vats are divided into electro-positive and electro-negative divisions, which is directly opposite to all the earlier experiments and the direct oxidation processes. In our processes the hydrogen has a tendency to reduce the hypochlorites instead of the chlorates which latter danger, as I have stated above, is eliminated by getting rid of the hydrogen by mechanical or chemical means.

Now, as to the advantages of the electric processes for the production of chlorate it must be clearly seen that to produce chlorates from artificial products it must cost considerably more than from natural products. Of course, it will take some time before the large manufacturers of chlorates will see this, for the simple reason that the amount of money invested in alkali works which are now producing soda by the Le Blanc and other processes (in which chlorine gas is obtained as a by-product, and is then led into lime chambers forming bleach and, as shown above, chlorates) prohibits them from changing their plant except at a large expense and under various difficulties, such especially as violating the laws, as in England, where the chlorine must be used or consumed and must not find its way in any way, shape or form into the rivers or into the atmosphere. Some individuals have said that there were various processes tried and proved failures. I know of some slightly which were tried. not in producing chlorates, but in abstracting money from stockholders' pockets, but even these processes, if they were given a little more mechanical, chemical and electrical attention, would yield a fair profit. The production of the chlorates by electrolysis has come to stay just as the electrolytic caustic soda and chlorine gas processes. They are built on solid theories and have been brought down with but few exceptions to solid practice. Individuals may call them snares and delusions for private gain, but the success of the same will be the answer.

Generally stated, in carrying my process into effect, I prepare an aqueous solution containing a bromide or chloride corresponding to the chlorate or bromate desired. For this purpose, a vat is used, such as shown in Figure 1 for example. This vat is usually divided into two compartments by a porous partition, or instead a porous vessel may be placed therein—in either case the vat being divided into two compartments. An electric battery with the opposite wires leading to electrodes placed in the compartments of the vat is provided, the circuit being closed through the aqueous solution therein. The bases are set free in the electro-negative compartment, and the halogen in the electro-positive division. If the nascent hydrogen reduces in the electro-negative compartment, the electrode therein may be agitated to prevent such action. That is to say any excess of hydrogen will have a tendency to polarize the negative electrode, which tendency is obviated by agitating that electrode. Otherwise that part of the electric current employed in electrolyzing would then be trying to overcome this state of polarization, and would show itself in an undue rise of the 120° temperature in the bath. Then again hydrogen must be gotten rid of to a certain extent to prevent its combining with the chlorine, and thereby forming hydrochloric acid, which would react upon the hydrate of potassium till they would be mutually neutralized, forming again the chloride of potassium.



APPARATUS FOR THE MANUFACTURE OF CHLORATES BY ELECTROLYSIS.

FIG. 2.

In the exemplification of my invention I will place in the vat a potassic chloride. The electric current separates it into its respective halogen and base. The potassium in this case being the base, will be deposited in the electro-negative compartment, where it takes up one atom of oxygen from the electrolyte and also sets free one atom of hydrogen forming caustic potash.

Fig. 1 is a perspective view of an electrolytic bath to which I have applied my improvements. Fig. 2 is a diagrammatic view embodying my improved process.

Referring to the drawings—A represents the vat.

B is the porous partition dividing the vat into the usual positive and negative compartments.

C is the negative electrode, such as cobalt, platinum, iron, carbon, nickel, or other suitable material.

D is the positive electrode, preferably platinum.

E is the positive and F the negative compartment. The electro positive division E is covered by a top G fitting air-tight thereon. The upper portion of compartment E contains halogen or acid radicals set free during electrolysis. Compartment F contains the electro negative caustic solution or basic radicals.

H is a pipe leading from the upper part of the electro-positive division to the lower part of the electro-negative division, preferably outside the vat A, and provided with valve I at either end, for closing or opening the pipe.

J is the positive wire, having a branch K leading to electrode D, and L, the negative wire having a branch M leading to the electrode C, from any suitable battery.

In Fig. 2 is shown a pipe N, having a valve O therein, leading from the electro-negative tank F, by means of which the tank F may be discharged into the vessel P below. Vessel P is designed to receive and hold the bromates and chlorates, in which they may be allowed to settle.

Q is a vat for holding the residue of the process.

R is a pipe, having a valve S therein, through which the vessel P may be tapped to draw off the material other than the bromates and chlorates.

T is a resaturator-tank having connection with the bottom of vat Q by a pipe U in which is placed a pump V for forcing the residue with water up into said resaturator to utilize the product over again.

W is a pipe, having a valve X, leading from the resaturator near its top, back into the electro positive compartment E.

The resaturator T contains material to make the product.

10 is a deflecting apron for the purpose of forcing the discharge into the bottom of the gas-holder before it is fed again to the vat A.

The following operation of my improvements will be described: An electrolyte having, in a solution of water, say potassic chloride, is put in the vat A. I then electrolyze the same. The halogen or acid radical chlorine goes to the electro-positive division, the potash to the electro-negative division, decomposing the water there and forming caustic potash. The electro positive division E being air-tight, as soon as the chlorine is liberated it rises in the air above the electrolyte, goes through the pipe H, and decomposes the caustic solution in the electro-negative division F, forming chlorate and chloride of potash.

In Fig. 2 the product and by-product are gathered in vessel P. Here the product settles in the bottom of the vessel and the by-products are let through pipe R into the receiving vat Q. The pump V pumps the by-products through pipe U into the resaturator T, which contains potassic chloride, and resaturates the once-used electrolyte. Then, if valve X is opened in pipe W the by-products are

carried to vat A and the process is carried over again.

8 is a pipe, having the valve 9, tapping the compartment F and the pipe W, by means of which the by-products may be led into both compartments E and F. The electric current needs only to have its voltage high enough to overcome the affinities of the halogen for the base.

The by-product varies according to the original substance put into the vat. If chloride of potassium be the material to produce the desired chlorate the by-product is then chloride of potassium, caustic potash water, chlorine gas, hydrochloric acid, a little chlorate of potash, and a percentage of the original impurities which the original chloride of potassium contained before putting the same into the vat. I prefer to have the vat at a temperature of 120° Fahrenheit in order that the hypochlorite formed will be resolved into chlorate and chloride of potassium.

My claims are stated as follows in my United States patent specifications:

1. The combination of an electrolytic bath having positive and negative compartments, a pipe connecting the two, a settling tank connected with said bath, another tank, located between the settling tank and bath, and pipes connecting them into a continuous system.

2. The herein described process which consists in placing an electrolyte containing a haloid salt in a vat, electrolyzing the same, thereby setting free the halogen at the positive electrode, and the base at the negative electrode, and finally transferring the liberated gas from the positive to the negative electrode, and thereby bring it into contact with the base.

3. The herein described process which consists in placing an electrolyte containing a haloid salt in a vat, then electrolyzing the same, thereby setting free the halogen at the positive electrode and the base at the negative electrode, transferring the liberated gas from the positive to the negative electrode then conveying the liquid electrolyte to a settling tank, and then leading the by-products of the electrolyte to a resaturator and back to the vat.

Read the "trade notes" and the market review every week if you want to keep posted.

Extraction Battery for Alkaloidal Assaying.*

By Prof. John M. Francis.

Although the Pharmacopœia of the United States has not fully recognized the importance of an exact standardization of our alkaloid-bearing galenicals, in accordance with the amount of these constituents contained, yet the emphatic opinion of physicians as manifested in practice, no less than the moral and, I may say, financial responsibility of the manufacturers, has long since demonstrated that all such pharmaceutical preparations whose active constituents are known should be estimated.

Without entering further into a discussion of the merits of a question which is fast working out its own solution, I propose to submit to the readers of the *Bulletin* who are interested in such matters, a diagram, which is almost self-explanatory, of the battery of extractors which we regard now as indispensable to our laboratory.

Different methods of extracting alkaloids have been proposed from time to time, and almost every chemist pursues some pet method, or modification of a method, which seems to him best adapted to his purpose. The principal objection to the majority of these is that they require constant attention or personal manipulation throughout the operation; furthermore, most of them are somewhat expensive or complicated. If one is burdened with spare time, or has only an occasional assay to make, these leisurely methods are sufficient; but to the busy pharmacist, or for the chemist employed in the pharmaceutical laboratory where alkaloidal assays come in never-ending succession, there is a keenly felt want of some method more automatic, expeditious, economical, and at the same time thoroughly reliable.

This battery consists of a frame of ¾-inch piping 32 inches high and 7 feet long, supporting a grooved plank 6 inches wide, 8 feet long and ¾-inch thick, to which are strapped by inch copper bands (controlled by thumb screws) sixteen condensers. For attachment to these condensers there are sixteen extractors ("perforators"—see Fig. 2). The receptacles for the extractive fluid—ether, chloroform, etc.—are 4-oz. wide-mouth flasks; these are accurately fitted by corks to the arms of the extractors, and rest upon openings in the top of a copper steam-bath.

The steam-bath is 8 feet long, 5 inches deep, and 4½ inches wide; the openings in this bath are sixteen in number, diameter 1¾ inches, and closed when not in use by ground brass caps. Heat is furnished by two brass pipes ¾ inch in diameter. The

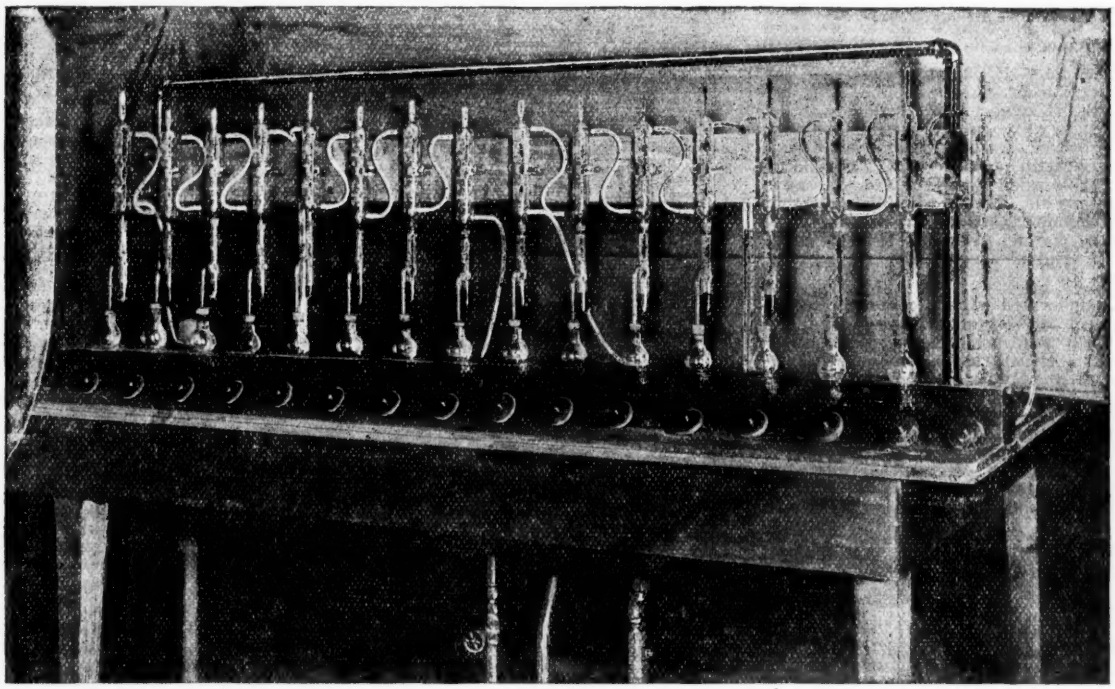


FIG. 1. PROF. FRANCIS' EXTRACTION BATTERY.

estimated cost—about $75—for such an apparatus is not exorbitant.

The extractors noted are made according to the design of Bosman's modification of the apparatus of Van Ledden Hulsebosch.* Measurements are given with the cut, so that anyone with a reasonable degree of skill can make such an extractor.

Before conclusion, a word as to the efficiency of this apparatus. Our practical experience in this laboratory is probably second to none in extent and variety, as our books for 1893 show nearly 1,500 alkaloidal assays made upon marketed products, and hence we are in a position to test thoroughly this method. We have employed this battery for about two months and found it reliable, economical, and labor-saving

Pharmaceutical Laboratory of Parke, Davis & Co., February, 1894.

*Reproduced by courtesy of the *Bulletin of Pharmacy*.

*See *Pharm. Centralhalle*, 1893, p. 101, *Pharm. Rundschau*, 1893, pp. 83 and 186, and American Druggist and Pharmaceutical Record, vol. 22, pp. 180, 372 and vol. 23, p. 113.

Pharmaceutical Progress.

Iodocasein is a yellowish powder with a faint odor of iodine which is recommended by Prof. Rohrmann as an antiseptic dressing either alone or precipitated on gauze.

Essential Oil in Asparagus.—Crouzel has ascertained that the peculiar odor of the urine after eating asparagus is not due to the presence of asparagin, but to a volatile oil which he has extracted from asparagus, and from urine passed after eating asparagus (*Deutsch. Med. Ztg.*, through *Pharm. Centrh.*, xxxv, 217).

Antirabic Serum.—Tizzoni and Cattani have produced an antirabic serum (*Pharm. Post*) giving the highest immunity by using *large* animals instead of the small ones heretofore employed. This serum is claimed to be absolutely innocuous, producing no infection whatever. It is also stated that it is efficacious even after the first symptoms of hydrophobia have made their appearance and to be almost instantaneous in its effect.

Canadine.—E. Schmidt describes the production of pure canadine from hydrastis rhizome. The alkaloid was obtained in white needles melting at 132°.5, and proved to be tetrahydroberberine, isomeric with hydroberberine, and yielding berberine when a solution was exposed to light and air. Numerous salts and other compounds of canadine are described, for details of which reference must be made to the original account (*Archiv.*, ccxxxii., 136).

Camphorated ethyl iodide is recommended by Vielguth (*Deutsch Med. Zeit.*) as a subcutaneous injection in the treatment of cholera in conjunction with the treatment with salt water infusions and tannin injections. So long as the absence of vomiting makes it possible a 10 per cent. solution of sodium dithiosalicylate should be administered internally. As no intimation is given of the nature of "camphorated ethyl iodide" it is presumably a solution of camphor in ethyl iodide.

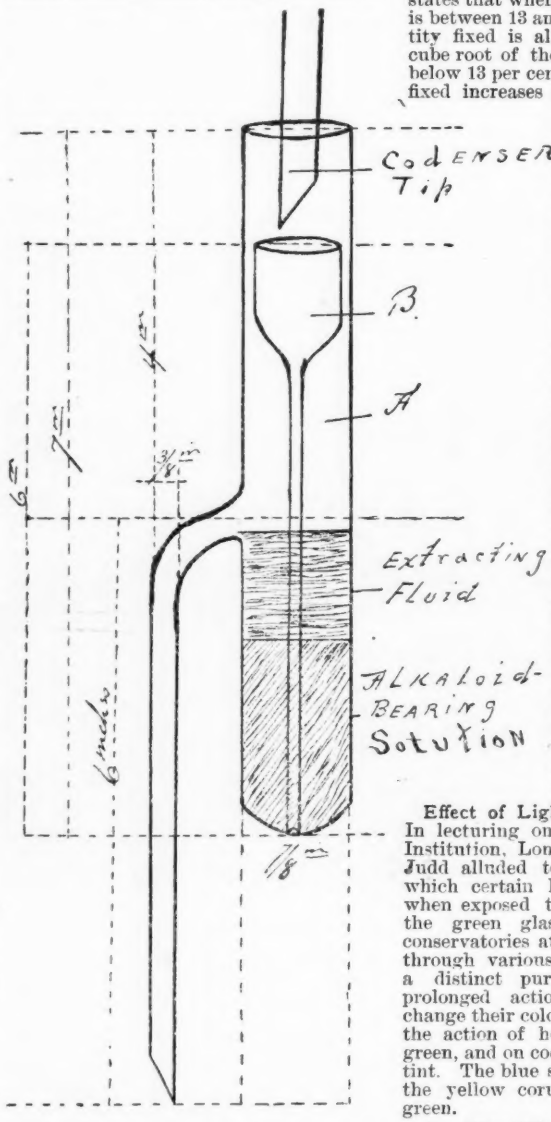
The Edible Lichen of Japan.—Dr. M. Miyoshi, of Tokio, describes in the *Botanisches Centralblatt* (vol. lvi, 1893, pp. 161–163) the edible lichen of Japan known as "iwatakn," and names it *Gyrophora esculenta*, sp nov. It owes its economical value to the large amount of starch and of gelatinous substance which it contains. It has no bitter taste nor purgative properties. It is very abundant in some parts of Japan, growing especially on moist granite rocks in mountainous districts, which it frequently entirely covers. It is collected in large quantities by the mountaineers, dried and sent into the towns, whence a considerable amount is exported. It is largely used as a condiment in Japanese cookery.

Artificial Production of Citric Acid.—In studying the conversion of sugar into oxalic acid under the influence of certain fungi, Dr. C. Wehmer discovered another analogous kind of fermentation by which citric acid is produced from sugar. The change is probably the result of a process of oxidation represented by the following equation:

$$C_6H_{12}O_6+3O=C_6H_8O_7+2H_2O.$$

A full description of the conditions under which it takes place was given in a paper communicated to the Berlin Academy of Sciences last June. This mode of producing citric acid is now being worked at Thann and Mulhausen, and there is a prospect that, in addition to its scientific interest, it will be of industrial importance. In connection with this subject the *Kew Bulletin* calls attention to the interesting coincidence that citric acid has been found in sugar cane juice, and that it sometimes makes its appearance during the process of sugar manufacture.

Ointment Bases.—Shoemaker (*Medical News*) reviews and discusses the various ointment bases, and concludes that in the majority of cases our choice must rest upon lard or lanolin. Petroleum jelly resists chemical change and is pleasant in appearance, but it is apt to be contaminated with irritant impurities, and its absorbability is slight. Lard is readily absorbable, but readily undergoes decomposition. Lanolin is almost devoid of odor, very rapidly absorbed, aseptic, and unalterable.



MODIFIED HULSEBOSCH EXTRACTION APPARATUS.—SEE PAGE 275.

FIG. 2.

Cornicide.—Lanolin forms the basis of another salicylic-acid plaster, and cocaine is added with the idea of making it painless. To form the plaster, mix 6 drachms of salicylic acid with 10 drams of lanolin. Dissolve 5 grains of hydrochlorate of cocaine in a small quantity of warm alcohol and mix the solution with 1 fluid ounce of creosote. Mix ½ ounce of melted white wax with ½ ounce of vaselin and add the creosote solution. To this add the cocaine solution and mix.—*St. Louis Clinique.*

Iodine and Starch.—E. G. Rouvier, in a further communication on the fixation of iodine by starch (*Ph. J.*, *ante*, p. 343), states that when the proportion of iodine is between 13 and 17.5 per cent, the quantity fixed is almost proportional to the cube root of the quantity added. When below 13 per cent. the quantity of iodine fixed increases more rapidly, but with more than 17.5 per cent. present the increase proceeds much more slowly. Potato starch appears, in the presence of a large excess of iodine, to fix a lower quantity than wheat starch, but rice starch behaves exactly the same as the latter (*Comp. rend.*, cxviii, 743).

Sodium Borosalicylate.—P. Adam prepares this compound by heating together boric acid and sodium salicylate in the presence of water. A syrupy liquid is produced which yields, on evaporation, a transparent horny substance. This when carefully desiccated becomes a white opaque mass. It dissolves in four times its weight of cold water, and in its own weight of water at 40°. It is also soluble in methylic, ethylic and amylic alcohols, acetic ether, and glycerin, slightly soluble in acetone, but insoluble in ether. Solutions made by the aid of heat remain supersaturated (*Bull. de la Soc. Chim.* [3], xi, 204).

Effect of Light on Colored Glass.—In lecturing on the ruby at the Royal Institution, London, recently, Professor Judd alluded to the changes in color which certain kinds of glass undergo when exposed to light. He said that the green glass panes used in the conservatories at Kew gradually changed through various shades of yellow to a distinct purplish hue under the prolonged action of light. Rubies change their color in a curious way under the action of heat. Bluish rubies turn green, and on cooling regain their original tint. The blue sapphire turns white, and the yellow corundum crystal becomes green.

An Alloy Which Adheres to Glass.—M. F. Walter has found that an alloy consisting of ninety-five parts of tin and five parts of copper adheres so tenaciously to glass that it may be employed as a solder to join the ends of glass tubes. It is obtained by adding the copper to the tin previously melted, agitating with a wooden stirrer, casting or granulating, and then re-melting. It melts at about 360 deg. C. By adding from a half to one per cent. of lead or zinc, the alloy may be rendered either softer or harder, or more or less easily fusible. It may also be used for silvering metals or metallic thread.—*Revue Scientifique.*

Thioform (bismuth dithiosalicylate) is further lauded by L. Hoffman (*Berlin thierärtzl. Woch.*, 1894, No. 14), who states that when bleeding wounds are freshly sprinkled with it it stops the bleeding, and that thioform gauze has the same property. It is also recommended as a partial substitute for coaine in ophthalmology, as it has an anæsthetic action when sprinkled in the eye. It is described as follows (see also this journal for July 27, 1893, page 42, and for November, 1893, page 294): It is insoluble in water, alcohol and ether, partially soluble in alkaline aqueous solutions, in blood or in serum, a quadri-basic bismuth salt of dithiosalicylic acid being formed which is insoluble in alkaline media while at the same time a portion of the dithiosalicylic acid combines with the alkali forming a soluble salt. The fact that dithion (sodium dithiosalicylate) when used direct does not yield such satisfactory results as do the salts obtained from thioform is explained by the presence of the bismuth salts in the latter which act as absorbents of moisture.

Glycero-Phosphates.—At the Academy of Medicine recently Dr. Albert Robin read a communication concerning the first results obtained by him by means of a new medication which he finds to exercise a specific action on nervous nutrition. The treatment is by glycero-phosphates. By these he hopes to obtain effects at least equal to those produced by the famous Brown Séquard elixir. Assuming that the qualities of "sequardine" are probably only due to the phosphorus it contains, Dr. Robin has experimented with a preparation of glycerin and phosphorus, obtaining excellent results in influenza convalescence, etc. He speaks of his new medicament as exercising the contrary effect to antipyrin, the latter being given in cases of intense nervous excitability, whereas glycerophosphates are intended as a treatment for nervous depression. The new preparation appears to resemble Dr. Ashburton-Thompson's solution. L. Portes and G. Prunier describe a process for preparing the calcium salt. Phospho-glyceric acid is first prepared by maintaining a mixture of liquid phosphoric acid and glycerin at a temperature of 100° to 110° for six days. After cooling, calcium carbonate is added until the acid is neutralized. The precipitate formed is dissolved in cold water, and the solution filtered and evaporated at a low temperature. The product is a white, slightly crystalline powder, which is soluble in fifteen parts of cold water, almost insoluble in boiling water, insoluble in alcohol, and gives but a faint reaction with ammonium molybdate (*Journ. de Pharm. et de Chim.*, [5], **xxix**, 393).

The Martindale Herbarium.—*The Bulletin of the Torrey Botanical Club* notes the purchase of this herbarium for the Philadelphia College of Pharmacy, and considers it another evidence of the rapid advance of modern pharmacy along sound, scientific lines. It says: "It will be recalled that the herbarium of Wm. M. Canby was purchased some months ago by the New York College of Pharmacy, and an account of it was at that time published in the *Bulletin*. Although the Martindale collection is not nearly as extensive as the one secured by the New York institution, and the specimens are not nearly as fine nor as well named up, it is a most valuable accession to the teaching equipment of the Philadelphia college, whose officers are to be heartily congratulated on its acquisition. Mr. Martindale was a diligent student of the marine Algæ, and his herbarium is rich in specimens of these plants. The deposition of these two important private herbaria where they will be maintained and their growth continued in practical directions is an important occurrence in the history of economic botany."

Sulphanilic acid (para anilin sulphonic acid), which was recommended in 1883 by Ehrlich and Krönig for the treatment of iodism, has been strongly recommended by Valentin (*Corrosp. Bl. für Schweiz Aerzte*) as an excellent and prompt agent for the suppression of certain symptoms of acute catarrh. The swelling and the watery secretion of acute coryza are either very much lessened or totally banished in less than two hours by this remedy; while less certain it is almost equally efficient in laryingitis, reducing the redness. In catarrh of the middle ear it removes the pain if it does not cure the disease. The duration of the relief is not very great. After 24 or 48 hours the dose should be repeated. The medicine is non-poisonous in a dose of as high as 8 grammes (123 grains) per day. The exhibition of from 1 to 2 grammes daily for from four to six weeks did not disturb either the digestion or the other functions save that a slight diarrhœa occasionally showed itself. It is best to administer 40 to 80 grammes and 200 grammes of water daily in two doses of a solution consisting of 10 grammes of pure sulphanilic acid, 8.5 grammes of sodium bicarbonate.

Calcium Di-phosphate—A. Joly and E. Sorel, in describing the action of water on this compound, state that if crystals of the hydrated salt be thrown into boiling water they are rapidly disintegrated, and the liquid, which is acid to litmus, though neutral to methyl-orange, is found to contain a mono-phosphate. On examining the deposit formed, by means of a microscope, no trace of crystallization is visible, and analysis shows it to consist of an almost pure calcium tri-phosphate. After drying at the ordinary temperature over sulphuric acid, the composition of this compound was found to be $2Ca_3(PO_4)_2.H_2O$. If ebullition be maintained and the volume of water kept constant, a second reaction takes place between the liquid and the deposit. Small crystals appear, very slowly if the proportion of the calcium di-phosphate were less than one per cent., more rapidly if between that and fifty per cent., but in any case the reaction is complete in about three hours. The final product is a partly amorphous mixture, $CaO.P_2O_5$, when not more than ten grammes per liter of calcium di-phosphate is used. Crystallization is total, however, with larger proportions, an intermediate phosphate apparently being formed, thus—$Ca_3(PO_4)_2 + 4Ca_2H_2(PO_4)_2 + 2H_2O$; while with very large proportions, the crystals of the latter are found mixed with those of an anhydrous bi-calcium salt. The transformation of the crystalline hydrated calcium di-phosphate into the crystalline anhydrous salt, by the action of boiling water, appears therefore to be effected in two different stages, the amorphous calcium tri-phosphate being the intermediate product (*Comp. rend.*, cxviii, 738).

Castor Oil as an Adulterant—L. Maupy describes a method of detecting castor oil in croton oil or copaiba, which is based on the reaction that occurs when castor oil is subjected to dry distillation in the presence of potash or soda, sebacic acid and caprylic alcohol then resulting from the decomposition of ricinoleic acid, thus $-C_{18}H_{34}O_3 + 2KOH = C_{10}H_{16}K_2O_4 + C_8H_{18}O + H_2$. The sebacic acid, obtained by treating the alkaline sebacate with a mineral acid, is insoluble in cold, but soluble in boiling water. Oleic acid submitted to distillation also yields sebacic acid, but the latter is not produced from olive or poppy oil in presence of excess of alkali, and it is probable that in this respect castor oil may be peculiar. In testing suspected copaiba ten grammes of it is warmed gently in a silver capsule with as much dry caustic soda. When the effervescence subsides the odor of caprylic alcohol will indicate the presence of any castor oil. Subsequently, the product of the reaction is treated with about fifty grammes of distilled water and warmed to assist solution. When cold the insoluble resin is filtered out, and the liquid treated in a porcelain capsule with excess of nitric acid. It is then boiled and filtered while hot. On cooling, if castor oil has been present, a white precipitate of sebacic acid forms, which is soluble in boiling water, and precipitated from the solution by subacetate of lead as sebacate of lead. This process is, said to detect as little as a few drops of castor oil in ten grammes of copaiba. In the case of croton oil the procedure is the same, except that only five grammes of oil should be treated and the other substances reduced in quantity by half (*Journ. de pharm. et de chim.* [5], xxix, 362. Through *Pharm. Journ.*).

A Novelty in Poison Bottles.

R. Watson Councell writes to the *Monthly Magazine of Pharmacy* concerning a novel idea he has for a poison bottle. The cork is simply cut in two, horizontally, near the small end, and the entire cork threaded on a string with a knot below the lower segment of the cork. The free end of the string is attached to a label bearing the word poison.

On the cork being fitted to the bottle containing poison there are several things which attract attention, even in the dark. First, the string; second, the label (bearing the word poison); if these are not noticed, then if the cork is seized and pulled, only the upper segment comes away, sliding on the string, and the contents of the bottle cannot be poured out. It is necessary to pull on the string itself in order to remove the cork entire. This appliance can be made by any one, costs nothing, is effective, and suits any bottle or phial. The boy could easily prepare a few dozen of these corks, all sizes, ready for use or for sale in the shop. On the bottle itself the poison label should always be stuck *above* the directions so as to be seen *first*, as, when the poison label is placed at the bottom of the bottle or phial, it is often covered by the hand grasping the bottle, and is not seen. I hope this simple device will be rapidly made known to the public by doctors, chemists, druggists, and newspapers.

FLOOR WAX.

[*Bayr. Ind. und Gewerb Blätter.*]

	Parts.
Ceresin	20
Soft paraffin	5
Oil of turpentine	15
Benzine	20

Melt the ceresin and paraffin together and after removing from the fire add the other ingredients.

SILVERINE.

[*Pharm. Centralhalle.*]

	Parts.
Precipitated chalk	30
Ammonia water	30
Alcohol	45
Water	200

Label "For polishing silver; shake well before using."

The Vagaries of Modern Pharmacy.*

The services rendered by chemistry to therapeutics is not an exhausted subject. Certainly our predecessors already possessed a goodly medicinal treasury, but it seems very insignificant when compared with what we now utilize. Chemistry has loaded materia medica and pharmacology with wealth; it is the mother of new remedies, and we are proud of its aid; it has given us our anæsthetics, antiseptics, hypnotics and antipyretics. These groups of remedies enable us to give relief in many cases where our forefathers were quite helpless. To them chloroform, ether, carbolic acid, iodoform, creosote, chloral, the salicylates, and antipyrin were all alike unknown. But here again, and more so than with respect to the alkaloids, there are shadows in the picture. Chemists and chemical manufacturers add more and more to our store of remedies day by day without stint or truce, without heeding the despairing cries of physicians already overstacked with drugs. We are tempted to cry out for mercy. This is no exaggeration, for these new chemical products are all forced upon the same therapeutic market under the most attractive names, and all proclaimed aloud with the noise of most perfect advertising machinery. This is now done to an extent that, in my opinion, is detrimental to the interests of therapeutics. I am not speaking of quack remedies, the orvietana of our day, of those secret specifics which the medical man views with wholesome horror, to which, and to whose use the old adage, *Trompeurs, Trompes, Trompettes*, can be so well applied. I am speaking of genuine well-known products, for, unfortunately, modern industrial chemistry, in manufacturing and in placing at the disposal of medical men these drugs, does not at all object to their being purchased by the general public. If this be not so why do their proprietors select for their names the fascinating names that act as veritable flags to attract the public—for instance, anti-nervine, antiphthisine, anti-rheumatine, anti dysenterine, and, most expressive of all, migrainine. I fully appreciate the difficulty of finding new names for these new products, and can understand that the manufacturer would shrink from giving them the names derived from their chemical composition, for these, generally speaking, could only be pronounced with linguistic gymnastics and intolerable strain upon our memory. I must, with great regret, note that we have departed from the ancient method which taught us to denominate new product according to their origin, and have followed freely a course of seeking for euphonious, sonorous names, proclaiming the therapeutic use and effect of the drugs designated by them. It is not sufficient nowadays to have a good remedy—say agathine; we must be assured of its superlative excellence, hence aristol. Do you want to prescribe for a patient who is "out of sorts," you have euphorine; for a lack of appetite, you have orexine. You desire to procure sleep for him: you have hypnal, hypnon, somnal, or somniferine. You wish to lower a febrile temperature: do not let the emergency trouble you, for you have antipyrin, antifebrine, antithermine, thermomine, thermofugine, pyrodine, and thermodine. You want to assuage pain? *Eh bien*, you have awaiting your orders analgesine, analgeine, exalgine, exodyne, and neurodyne. Or you have to deal with a case of heart disease: you have cardine. Or you desire to stimulate urinary secretion: you have diuretine, pheduretine, and uropheine. To check the formation of pus there is a remedy termed pyoktanine; and to combat spasms antispasmine. I do not wish to exhaust your patience, and I will spare you the enumeration of the antiseptics, the disinfectants, the microbidines *e tutti quanto*. Ten years exactly have elapsed since my honored colleague Professor Rossbach of Jena published an article full of wit and sound sense on these tendencies of modern therapeutics, and in those days we had not the long lists of antiseptic and antipyretic remedies. Nor was it then imagined that the essential extracts of the organs of animals, of which the late Professor Brown-Séquard and M. C. Paul were the earliest to explain the therapeutic value, would find a place in materia medica, nor cultures of microbes. It was not foreseen that we should have to chronicle in 1894 the sale not only of séquardine, but also of veritable bacterial products such as tuberculine, tuberculocidine, antituberculine, antitoxine, *κ.τ.λ.* How shall we check the fury of this flood? There seems no reason why it should come to an end.

*From an address delivered at the Eleventh International Medical Congress, April 5, 1894, by Prof. J. B. Stokvis, professor of pharmacology in the University of Amsterdam.

Mecca Balsam and Myrrh.*

the southwestern districts of Arabia and the northeastern corner of Africa are characterized by the production of trees yielding aromatic exudations. G. Schweinfurth observes that, although the shrub yielding mecca balsam, *Commiphora opobalsamum*, Engl., is widely distributed over the coast territory of Arabia, the adjacent islands, and southern Nubia, the balsam is collected only in the valleys near Mecca; the plants producing olibanum and myrrh prefer low mountains, 3,000 to 5,000 feet high, and rocky soil. *C. opobalsamum* averages about fifteen feet in height possesses a yellow papery exfoliating bark, and produces long, thin, grayish black twigs, from the ends of which a small quantity of balsam exudes. Although not an eye-witness of its collection, Schweinfurth thinks the balsam must be obtained by crushing and boiling the ends of the twigs, or by pouring boiling water over them. Collection by exudation is out of the question, as only a few centimeters toward the ends of the twigs contain much sap, appear varnishy, and yield when incised minute drops of bright green fluid possessing the characteristic odor of mecca balsam. This is the substance referred to in the Bible under the name of myrrh, an error attributable probably to the similarity of the old Hebrew word "mar" with the late Arabic designation "morr" for the gum resin myrrh. It appears never to have been collected in large quantity; according to information from the principal spice merchant in Cairo, at the present time only a few kilogrammes are annually brought to the market.

Myrrh, according to Schweinfurth, can be yielded only by *C. abyssinica* or *C. schimperi*, and is probably obtained principally from the former, which is widely distributed, and in certain districts abundant. A. Deflers actually collected myrrh from this plant, which was pointed out to him in the Fadhli district east of Aden as the source of the myrrh brought thence in large quantities into commerce, and a specimen of this myrrh was presented by Schweinfurth to the Pharmaceutical Society of Berlin. The tree is a small one, seldom exceeding 30 feet in height, with a yellow or brown shining papery exfoliating bark. When incised the bark yields abundance of yellowish milky fluid, which solidifies to myrrh. The plant also occurs in northern Abyssinia, but not in such abundance as to offer sufficient inducement to collect the gum-resin; the drug comes probably from the northern districts of Yemen and the mountains of Assir. *Balsamodendron myrrha* (*Hemprichia myrrha*, Nees, Schwf.) yields no myrrh; the plant is completely odorless, and yields no trace of resin when branch or stem is incised. Hemprich noted on his specimen that possibly this species yielded myrrh, but the evidence to that effect was insufficient. Nees v. Esenbeck described the plant, however, as the source of Arabian myrrh, hence the error. *C. schimperi* grows in Yemen, and produces abundance of gum resin closely resembling myrrh. It is also found in Abyssinia, where, however, little or no myrrh is collected from it.

* From a report of the Pharmaceutical Society of Berlin.

How to Keep Clippings.

The following method is followed by Dr. Marcus Benjamin, formerly editor of the *American Pharmacist* and now subeditor of the "Standard Dictionary," who describes it in the *Pharmaceutical Era:*

On the back of each sheet I write two things: First, the subject; second the title of the clipping. Thus, under the general title of nitrogen, I have items about the nitrogen oxides and the nitrogen acids; consequently, I find my sheets read, as for instance:

"Nitrogen—Nitrogen and Electricity" (being a clipping from the Boston *Journal of Chemistry* for January, 1877), and "Nitrogen—preparation of nitric oxide," being a clipping from the *Scientific American* for May 24, 1879. These sheets are all alphabetized under the second title, except as they refer to special subjects. That is to say, I try to keep the items having direct reference to nitrogen as an element together, those having reference to nitric acid together, and so on. In such a matter the personal judgment of the individual must be followed, and in this feature lies the great imperfection of any system. I have separate places for hydrogen, nitrogen and oxygen, but items on liquefaction of gases are sent to gases. This is purely arbitrary, but I see no other way to advise. Again, the subject of sewer gas came into prominence, and for a time I filed the items under gas, but the package grew too bulky, and so I made a new one for sewer gas and sent it to S. It is necessary to exercise arbitrary and special judgment in such matters I group my metallic mixtures under the general head of alloy, and there are the clippings from brass to type metal, but if I should (as I frequently do) find any one kind of alloy, as brass, for instance, growing too bulky, it would at once be given an independent heading. Alkaloids form another group, but I have a separate heading for opium alkaloids and one for quinine. The reasons are obvious. Cosmetics, under which formulas and notes on hair dyes and face preparations are kept, as well as disinfectants, are necessary groups. It would be impossible to give separate places to the many items otherwise, which, it must be remembered, are all alphabetically arranged, each one on a separate sheet of paper.

At first I used note-size paper, and had sheets cut for me in lots of 500. These I place in folders of heavy brown paper.

A separate folder is devoted to each subject, on the outside of which is written the general title. Thus, in the letter G, I find my titles run as follows: Gallium; gas, illuminating; gas, liquefaction of; gases; gems, diamonds; gems, amber, rubies, etc.; glass, glue, glycerin, gold and gums. These folders are made a little larger than two of the note sheets, and are folded in the center. In this way they are made to hold all of the single sheets. For each letter of the alphabet I have two black cards of thick pasteboard, and between these I place the individual packages. The covers are held over the packages by rubber bands, but as these break and soon wear out, I would recommend in their place a bandage made of cloth tapering to points, where a piece of narrow ribbon or braid is sewed on for use in tying. This bandage system is used by Professor Edward S. Morse of Salem, Mass., for holding pamphlets, and is the best thing for this purpose that I have ever seen. Between the rubber band and the cover I have an envelope on which is written a list of the titles of the packages contained between the boards, so that at a glance the subjects may be seen. This I use as a receptacle for loose items that for the moment I have not time to paste up. Also at the end of each letter there is a folder marked miscellaneous, in which are placed items that, as yet, have no regular folder for themselves.

Abstracts from the Sixth Edition of Dieterich's Pharmaceutical Manual.*

Wood Stains.

By wood stains are understood solutions of dyes, etc., used for coloring wood. They are fixed on the wood either direct or through the medium of some mordant. In many cases the color is only developed in the grain after the mordant is applied; sometimes the mordant merely changes the tone of the color.

The action of the stain is influenced not only by the mordant but also by the natural constituents of the wood, as tannin for instance. Consequently different woods sometimes give entirely different results with one and the same stain.

All the stains here given have been tried with oak, cherry, white beech, red beech, maple, ash, birch, linden, poplar, fir and pine.

To arrange them in a synoptical manner was by no means easy. I think that practical utility can best be served by designating the mordants and color solutions with letters and figures respectively and combining them in a tabular form under the colors. Following the table are the directions accompanied by a few remarks.

A more definite nomenclature of the colors is impracticable because of the variations of color and tone produced on the different woods Moreover the age of the wood to be stained and other circumstances enter into the matter of color.

MORDANTS.

a. Iron acetate solution, 100 grammes.

The following consist of solutions of the substance and quantity named in 100 parts of water: *b.* 2 parts of potassium bichromate; *c.* 1 part of cupric sulphate; and 1 part of potassium chlorate; *d.* 1 part of barium chloride: *e.* 1 part of calcium chloride; *f.* 2 parts of magnesium sulphate; *g.* 2½ parts of manganese sulphate; *h.* 3 parts of chrome alum; *i.* 1 part of iron chloride; *k.* 2 parts of iron sulphate; *l.* 2 parts of copper sulphate; *m.* 2 parts of tin chloride; *n.* 3 parts of alum.

COLORING SOLUTIONS.

1. Dissolve 20 parts of logwood extract in 80 of water.

2. Dissolve 10 parts of logwood extract in 90 parts of water.

3. Dissolve 20 parts of aniline chloride in 80 parts of 90 per cent. alcohol.

4. Rub 10 parts of Kassler brown with 30 parts of 10 per cent. ammonia water, put in a bottle and allow to stand corked for 24 hours. Then add 50 parts of water and 10 parts of 90 per cent. alcohol. Allow the mixture to stand for several days and then filter.

5. Boil 5 parts of potassa and 10 parts of Kassler brown with 50 parts of water for about half an hour, cool, add sufficient water to bring up to 90 parts by weight, and then add 10 parts of 90 per cent. alcohol.

6 Triturate carefully 5 parts of alizarin with 100 parts of water and add sufficient ammonia water to make solution smell strongly of ammonia.

7. Mix 1 part of alkannin, 10 parts of alcoholic extract of red sanders, 10 parts of dragon's blood and 180 parts of 90 per cent alcohol, and filter.

8. Dissolve 5 parts of alcoholic extract of red sanders and ten parts of aloes in 85 parts of 90 per cent. alcohol and 2 parts of 15 per cent. soda solution (sp. gr. 1.17).

9. Dissolve 1 part of gallic acid in 100 parts of water.

10. Dissolve 0.7 parts of water soluble nigrosin in 100 parts of water.

TABLE OF COLORS.

	Black.	Brown.	Red.	Gray.
I	$1+a$	4	7	$9+k$
II	$2+b$	5	8	10
III	$c+3$	6	$n+6$	
IV		*d. e. f. g. h. i. k. l.* or $m+6$		

DIRECTIONS FOR USING THE ABOVE.

Apply the stain to the wood, allow to dry, and then polish by rubbing linseed oil on the stained surface. If the stain is composed of two fluids first apply the liquid designated first in the table, and when dry apply the second fluid. For instance if the table reads "$c+3$" it is understood that the wood is first to be treated with the mordant *c* and then, after drying, with the coloring solution 3. If the table only says "5," however, no mordant is necessary, and the application of the color solution alone is sufficient, where several letters are given one may choose any one of the liquids so designated. If the figure precedes the letter the color solution is to be applied first, to be followed by the mordant. The precedence as indicated in the table should be closely followed.

REMARKS.

The combinations *i* or *k* with No. 6 color oak and cherry black. With $i+6$ the tone is bluish black, and with $k+6$ it is brownish black. The brown produced by No. IV has a more or less violet to reddish tinge on nearly all woods.

Infusions and Infusing.

The extraction of vegetable substances with hot water with but a short exposure to heat as it is done in the making of an infusion accomplishes the end, less of dissolving all the water-soluble constituents than of abstracting the volatile, aromatic and I might say sometimes imponderable constituents of the plant.

When we consider what a difference there is in the taste, and correspondingly in the stimulating effect, of the popular infusions tea and coffee when prepared in different manners, we cannot but realize the necessity for the exercise of the most exact care in the preparation of such infusions as come to us at the prescription counter.

According to the last edition of the German Pharmacopœia (III) the drug must be heated for five minutes in a closed vessel with the prescribed amount of hot water, allowed to cool and then strained. The seventh edition of the Austrian Pharmacopœia gives the same directions but supplements the five minutes heating in the water-bath by directing that the infusion stand fifteen minutes.

In order to avoid resort to the regular steam bath every day [in Germany the infusion is very much more used than in America—ED. AMERICAN DRUGGIST] portable water-baths are used at the prescription counter, with one or more infusion mugs, and which are heated by gas, petroleum or alcohol. The water-bath made by E. A. Lentz of Berlin from copper without any soldering is worthy of notice.

The same firm manufactures a rapid infusion apparatus which is of much value for night and for hurry prescriptions. It is made entirely of cast iron and contains a shell which has on top the infusion mug and ends below in a small pan which holds but very little water. Outside of this inner shell is the larger water reservoir which is connected with the small pan by a tube which keeps the water in the pan and that in the reservoir at the same height. On applying heat to the pan the water contained therein soon begins to boil, the steam surrounds the infusion mug and rising passes through the neck of the water reservoir, being there condensed. To fill up as needed the reservoir is provided with a small brass stopper which acts as a safety valve. The apparatus is made either for one or for two infusion mugs.

In the laboratory where larger quantities of infusions are made other methods are generally followed than at the prescription counter. There the parts of the plants which do not yield their virtues readily are, as a rule, submitted to the action of the water for some hours. Occasionally treatment with cold water precedes that with hot water.

Natural vs. Artificial Oil of Wintergreen.

In the semi-annual report of Schimmel & Co. (Fitzsche Brothers), Leipzig and New York, for April, 1894, we find the following with reference to the introduction of methyl-salicylate into the U. S. Pharmacopœia.

In a review of the pharmacopœia in question (*American Journal of Pharmacy*, 23, 1893, 600), G. M. Beringer strongly depreciates the introduction of artificial oil of wintergreen into that work. Now, the reasons which led to the incorporation of the synthetic oil into the materia medica are so apparent, and have been so thoroughly discussed, that it is really superfluous to waste words in mentioning them again. Natural commercial wintergreen oil is habitually adulterated in the grossest and most extensive fashion with petroleum, sassafras oil and other oils. Moreover, by far the greater part of the product known in trade as wintergreen oil is not wintergreen oil at all, but the distillate of the bark of a variety of birch (*Betula lenta*). These facts were doubtless the reason why the authors of the U S. Pharmacopœia decided also to include in their work the artificial methyl-salicylate. Mr. Beringer's objection that

*Translated for THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

methyl-salicylate, being a chemical product, is liable to be adulterated with other synthetic bodies does not seem to us to be justified.

For the rest we are of opinion that it is easier to detect adulterations in a uniform chemical body than in an essential oil. This is probably the general view of the matter.

We cannot agree with Mr. Beringer's opinion that the reason for the introduction of the synthetic product into the pharmacopoeia was its cheapness compared with the natural oil. In our opinion the pharmacopœia-commission has been guided in its decision simply by scientific considerations, which are, of course, the only right ones.

Medical Notes.

Toxicity of Antiseptics.—Désesquelle and Charrin have compared the toxicity and bactericidal power of a number of recently introduced bodies derived from corrosive sublimate, by the replacement of an equivalent of chlorine by equivalents of various phenols and naphthols. The results are represented in the following table, the antiseptic and bactericidal power of sublimate itself being taken as one hundred:

	Antisepticity.	Toxicity.
Phenol sublimate	104	12.5
Mercury hydroxy-phenolate	46	16
Phenol acetate mixed with Hg	41	16
Naphthol sublimate	32	27
Mercury beta-naphtholate	61	25
Mercury acetate	50	45

Though the differences in antiseptic power are very marked, the variation in toxicity is evidently much greater (*Nouv. rem.*, through *Pharm. Journ.*).

A New Treatment for Diphtheria—Blanchini (*Gazz. degli Ospitali*, March 20, 1894) describes a method of treating diphtheria which consists in the local application to the neck of the patient of fomentations moistened with a 2 per cent. solution of carbolic acid in lead lotion, these being applied at as early a stage as possible, with the idea of acting on the micro-organisms of the local lesions, and thus preventing their further spread. Application in this way secures the absorption of the phenol, both through the skin, which appears to be easy in the case of children, and also in the form of vapor through the mouth. This has been supplemented in the most serious cases by painting the pharynx, etc., with the following pigment: Salicylic acid, 3 grammes; absolute alcohol, 20 grammes; resorcin, 2 grammes; glycerin, 10 grammes; to be applied two or three times daily. The result has been very satisfactory; out of forty-five cases of varying severity, there were only two deaths, the duration of treatment varying from six to eighteen days on an average, but in one case being as long as thirty days. To these forty-five cases are appended notes of nine others treated by other practitioners in every case successfully.

Picric Acid in Treatment of Burns.—For some time past the treatment of burns by picric acid has been in use at the Charity Hospital, Paris, apparently with success. Dr Thiéry, who introduced it there, follows the simple method originated by M. Filleul. This consists in applying lint saturated in a solution of about ½ per cent. of picric acid solution to the injured surface, the dressing being well wrung out before being applied. In ordinary cases the dressing need only be changed every three days, and afterward every four or five days; it is considered preferable to allow the dressing to dry at leisure without covering it with mackintosh. Picric acid has a marked anæsthetic action on burns, in addition to its antiseptic and healing properties. There is no danger from erysipelas by its use, and no irritation of the skin is occasioned. A great drawback, however, is that a lasting yellow patch is apt to appear on the place where the picric acid has been applied.

The Injection and Congelation of Oil for the Control of Muscular Spasm.—Corning (*New York Medical Journal*, No. 802, p. 449) proposes for the control of troublesome muscular spasm the injection into the affected muscles of an oily substance having a solidification-point a little above the temperature of the body. The method was successfully employed in one case of violent clonic spasm of the splenius capitis muscle. The injected fluid consisted of oil of theobroma to which a sufficient amount of paraffin was added. The injection was made by means of a large syringe, armed with a stout, hollow needle, 800 minims of the fluid being used. It is recommended that the injection be made while the muscle is extended, even though it be necessary to administer an anæsthetic for the purpose. The oil should be distributed as well as possible throughout the affected muscle. After the oil, made liquid by warming, has been injected, it is hardened by the application of an ether-spray or an ice-bag. Too much should not be attempted at one sitting. Supplementary injections may be made after the first at intervals of three or four days.

Medical expert testimony has inexhaustible interest as a reform topic. The uses and abuses of this kind of proof continue to engage the earnest attention of medico-legal writers. As in the case of some of those chronic ailments of the human race so familiar to medical practitioners as clinical approbria, the number of remedies suggested attests the difficulty of the treatment; so in the present instance, every year calls out a new panacea for a disorder about the diagnosis of which there is substantial unanimity among physicians. One of the latest suggestions relative to the employment of experts comes from Dr. L. C Gray of New York, and evidently had its source in a very extensive personal experience in court proceedings. Dr. Gray's remedy takes a double form: (1) the selection of medical men by the presiding judge to sit on the bench with him in an advisory capacity in trials which do not need juries; and (2) a conference of all the medical men in cases tried by a jury. The former plan has its analogy in the use of assessors in the English admiralty courts. The latter method, in the author's opinion, would bring about substantial agreement among the medical witnesses with reference to facts and objective conditions, although conclusions therefrom, diagnostic and prognostic, might differ. To the objection that the system of medical assessors and medical conferences here urged is opposed to the principles of our law. Dr. Gray courageously answers that if that be so 'the principles of our law are radically faulty"; and again, "a law that ceases to be the embodiment of common-sense has outlived its usefulness and ought to be superseded"—*Boston Med. and Surg. Journal.*

Potassium Bichromate in Dyspepsia.—Dr. Thomas R. Fraser, of Edinburgh, communicated to the International Medical Congress at Rome an interesting paper on the value of bicromate of potassium as a remedy in gastric affections. He says that "having treated in 1884 with gratifying success a case of persistent gastric disorder by the administration of small doses of bichromate of potassium, I have since that time administered it in a large number of cases. The results have been so favorable that I feel myself justified in now stating my opinion of the therapeutic value of this substance and in briefly recording a number of the cases of gastric disorder in which it was used by me." He records 28 cases divided into two groups, under "dyspepsia" and "gastric ulcer." The doses ranged from $\frac{1}{15}$ gr. to $\frac{1}{8}$ gr. thrice daily, the smaller dose being found sufficient in the majority of the cases. The dose is given fasting and in as empty a condition of the stomach as possible and administered either in the form of pill or solution. Dr. Fraser says "an examination of these records shows that bichromate of potassium is capable of relieving, and often in a short time of removing, the entire group of symptoms—if we except constipation and anæmia—encountered in dyspepsia and especially pain, nausea, vomiting, and gastric tenderness." Bichromate of potassium possesses a strong anti-putrefactive power, and this action probably constitutes one of the causes of its anti-dyspeptic therapeutical value, but there are undoubtedly other causes, such as a direct or indirect analgesic action, and probably a selective action on the nutrition or function of certain histological structures, which Dr. Fraser is now engaged in endeavoring to determine.

Therapeutic Indication of Cocaine in Presence of Heart Disease.

Dr. Manglano (*La Med. Contemp.*) concludes from his investigations that (1) in suitable doses and with careful watching the use of cocaine is never contraindicated for local anæsthesia. (2) That as an anodyne it is unsafe and that it is particularly dangerous in heart disease. (3) The indications for its use in nervous affections are very circumscribed and is not at all to be commended in heart affections. (4) As an antidote when it has once been absorbed subcutaneous injections of caffeine (internal exhibition is less effective) are recommended. The antidote should be administered in proportion to the severity of the toxic symptoms. He has administered it in the form of benzoate of caffeine, having occasionally given as high as 3.5 grammes (52 grains) without observing any untoward symptoms from the antidote.

Inhalation of Calomel Fumes for Diphtheria.

Dr. Job Corwin of Brooklyn first proposed the inhalation of calomel fumes for diphtheria in 1881. Dr. Dillon Brown again calls attention to the subject in a paper read before the Metropolitan Medical Society. He proceeds as follows: Place an alcohol lamp in any suitable vessel, across the top of which lay a strip of sheet iron; on this place 15 or 20 grains of calomel at a time, and place under a small tent formed of a bed sheet, with the patient. Children should first be accustomed to the tent before any effort is made to begin the sublimation.

In all cases of diphtheria it is well to sublime 20 grains of calomel three times daily as a prophylactic against laryngeal invasion. As soon as laryngeal symptoms present themselves 15 grains should be sublimed every one, two, or three hours, according to the progress of the disease.

It ought to take from eight to ten minutes to sublime 15 grains. If the symptoms grow worse rapidly the frequency and size of the dose should be increased until at least 60 grains are used every hour. In spite of this a certain number of cases will require operative interference; but after the intubation or tracheotomy the fumigation should be continued, using for the first three days from 15 to 40 grains every hour and gradually decreasing the size and frequency of the dose, according to the indications. This must necessarily be, to a great extent, a matter of judgment and experience; but the average case that recovers will receive 20 grains by fumigation every hour for three days, and the interval will be increased one hour every day for the next three days, when it is stopped or used once or twice daily as a prophylactic, if membrane persists in the nose or pharynx. If in doubt as to what amount to use, the larger dose should always be used. In many cases over 2 000 grains have been used during the course of the disease, and the patient has recovered with few or no bad symptoms. In one case from 30 to 40 grains were used every hour for six days (making a total of nearly 5,000 grains). The child was not affected, except by a very slight stomatitis and some weakness and anemia.

It is to be remembered that the dose is determined, not by the amount of calomel which is sublimed but by the amount which is inhaled; therefore, even more important than the number of grains of calomel used and the rapidity of the sublimation is the size of the tent and the density of the fumes which fill the tent.

The following precautions should be observed:

1. The nurses and attendants should be warned against inhaling the fumes

2. The child's skin should be covered, so that the full effect of the fumes may be confined as much as possible to the local deposit on the mucous membrane.

3. Before each sublimation the child should be given a small dose of whisky.

4. After each sublimation the mouth, gums, and teeth should be cleaned with a weak solution of potassium chlorate, and if the gums become sensitive they should be sponged three times a day with a mixture of equal parts of tinct. myrrh., tinct nuc. gall., and tinct. ratanhiæ. All the re-deposited calomel should be wiped up from the furniture, etc., and the room well ventilated.

5. If the prostration and anæmia seem to be greater than the local manifestations would account for, the amount and frequency of the calomel should be diminished and the stimulants increased.

6. If the nasal passages are not infected, it may be wise, especially in older children who are taking very large doses, to cut off the fumes from the nose with a loose plug of cotton or ramie in each nostril.

7. It is very important to use pure calomel that has been washed free from all irritating impurities.

Bibliography.

PROCEEDINGS OF THE AMERICAN PHARMACEUTICAL ASSOCIATION at the forty-first annual meeting held at Chicago, Ill., August, 1892, also the Constitution, By-Laws and Roll of Members. Philadelphia: Published by the American Pharmaceutical Association. 1893. 8vo, pp. xviii and 1087.

The issuance of this work was referred to editorially in our issue of May 10. We supplement this with a review of the salient features of the volume. While the report of the Chicago meeting contained therein is of some interest, it contains nothing of value which has not already been given to our readers in the columns of this journal. The chief value of the volume lies in its "Report on the Progress of Pharmacy."

The arrangement of the "Report on the Progress of Pharmacy" is quite different from that of previous reports. The reporter has so systematized the work that he has been able in an introductory to arrange an index of headings. The titles are specific and clearly indicate the contents under all the headings so that facility in consulting the report is assured. Under Pharmacy we notice a new innovation in a department of "Prescription Difficulties." This if continued in subsequent reports, will be a thing of great value to the pharmacist. The proceedings of all the State pharmaceutical associations are grouped together. A review of some of the more important papers is given, with references to their publication in the current pharmaceutical journals. A perusal of this part indicates quite well the progress of pharmacy in the different States of the United States. It is highly gratifying to note that so many States are doing such excellent work.

The grouping together of new remedies in a class by themselves is a great improvement. It is evidently the idea of the reporter to make this work of great practical value to the pharmacist. Under the heading of "General" under pharmacy is included: statistics, educational matter, pharmacy at home and abroad, pharmacopœias, metrology, dispensing, physician and pharmacist, poisons, legislation, proprietaries, proprietors, clerks, women, dispensaries, advertising, miscellaneous (cements, glass, ink, etc.), soda water, adulterations and rubber goods. There is a storehouse of reference here.

It probably would be inadvisable to make extensive reviews of these subjects. The value of the reference alone is sufficient as it affords the pharmacist who is seeking new fields for advertising, or who is renewing his soda water stock, a knowledge of where the information is as the current pharmaceutical journals are easily procurable. Under the department of pharmacy are also grouped medicinal subjects of interest to pharmacists, urine and urinary analysis, bacteriology and ferments, microscopy and pharmacognosy. The arrangement of the matter is exceedingly well done, as may be seen under "Bacteriology." The first reference is to bacteriology for pharmacists, giving reference to an account of apparatus necessary for the practical work for the pharmacist. Then follows bacteriological chemistry, structure of bacteria, tests for bacteria, staining fluids and operations, apparatus for cultures, etc., and finally a consideration of the work on the bacteria in water, and the different kinds upon which special work has been performed during the past year.

In the department of "Vegetable Materia Medica and Botany" the reporter has introduced several new departments, the most important one being the consideration of plant constituents. The reporter has separated Chemistry into three departments: "Inorganic and Physics," "Chemistry of the Carbon Compounds" and "Applied Chemistry." Under Inorganic and Physics in the general and theoretical sub-department he has placed besides all matter relating to these subjects, analytical chemistry, alkalimetry and acidimetry. The inorganic acids are arranged alphabetically as are all of the elements. The reporter uses the Latin or English names of the elements more commonly employed. It might have been better to have adopted the Latin terms altogether. Still the convenience of referring to copper, gold, lead, mercury, instead of cuprum, plumbum, etc., may be considered more desirable. This is, however, a matter of training largely. This same question will not be raised when on coming to the organic part we find the organic acids arranged alphabetically, and likewise the alkaloids, the ethereal, fixed and mineral oils. Under "Applied Chemistry" is arranged an epitome of the work on albuminoids, butter, food, milk, peptone, proteids, water, etc. Then follows a page devoted to the names with date of birth and death of prominent pharmacists, botanists and chemists that have died during the past year. Following this is a bibliography that is the most exhaustive that has ever been prepared for the "Proceedings of the American Pharmaceutical Association."

As we have already stated editorially the work reflects much credit upon Mr. Kraemer the reporter and places the report easily at the head of such works of review and reference.

DAS FABRIKATION DER ERDFARBEN. Enthaltend Beschreibung aller natürlich vorkommenden Erdfarben, deren Gewinnung und Zubereitung. Handbuch für Farben-Fabrikanten, Maler-Zimmer Maler, Anstreicher und Farb-Warren-Handler. Von Dr. Joseph Bersch. Mit 19 Abbildungen. Zweite sehr vermehrte Auflage. Wien: Pest: Leipzig: A. Harteleben's Verlag-1893.*

The literature of paints and paint making is not nearly so full nor so accurate as it might be, and the revision which this work has received makes it a distinct addition. The feature of the work which most commends itself on a cursory examination is its practical character, which will render it of value to the practical manufacturer of paints of the kinds treated of.

PROCEEDINGS OF THE NEW HAMPSHIRE PHARMACEUTICAL ASSOCIATION at the twentieth annual meeting held at Isles of Shoals, September 5 and 6, 1893.

This volume contains an interesting report on the progress of pharmacy, from the pen of C. Milan Morse of Nashua. The president's address and secretary's report contain much of interest to pharmacists generally, but will be valued chiefly by the members of the association. The officers of the association are: Albert S. Wetherell, president, Exeter; Charles B. Spofford, vice-president, Claremont; Andrew P. Preston, vice-president, Portsmouth; Frank L. Way, secretary, Manchester; Amasa D. Smith, Ph.C., treasurer, Manchester; William P. Underhill, auditor, Concord.

Part VIII of Charaka-Samhita, an English translation of an ancient Sanscrit work on Medicine, to which reference has been made in previous numbers of this journal, has just been issued by the translator and publisher, Avinash Chandra Kaviratna, 200 Cornwallis Street, Calcutta. It contains many curious and valuable facts pertaining to the ancient practice of medicine by Hindu sages, and must be regarded as a valuable contribution to the native literature of India The publisher offers to send the complete work, postpaid to subscribers in the United States, for $15.

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*The manufacture of the earth colors, including the description of all earthy pigments occurring naturally, and the method of obtaining and preparing them. A handbook for color-makers, painters, etc. By Dr. Joseph Bersch. Vienna, Pesth and Leipzig. Published by A. Harteleben

Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

Benzoinol. J. M. A.—This is a highly purified preparation of liquid petrolatum containing benzoin in some form. It is a proprietary preparation and the title is copyrighted. We are preparing a list of the kind mentioned in your note which will appear shortly.

Paskola. M. A. D.—We are unable to give you any information regarding this compound.

Explosive Mixture.—R. A. L. says the mixture described below decomposed with violence while he was grinding the first-two ingredients.

Tannic acid	3 drams
Potassium chlorate	2 drams
Glycerin	4 drachms
Tincture of aconite	1 dram
Water	8 fl. ounces

This will always happen as potassium chlorate and tannic acid combine with violence when forcibly triturated. Our correspondent should have dissolved the two substances in separate portions of water, mixed them and then added the other ingredients to the mixture.

Simmons' Liver Regulator. D. E. S.—This is understood to have the following composition, viz.:

Hepatica	1 ounce
Leptandra	1 ounce
Serpentaria	1 ounce
Senna	1½ ounces

Mix. Put the ingredients into 2¼ pints of boiling water, let stand 18 hours, then strain. Add ½ pint of good whisky.

Cleansing Liquid.—C. L. M. & Co. requests a formula for a fluid for cleaning gloves, clothing, etc The formula given below may be used for the purposes indicated :

Castile soap in shavings	4 drams
Carbonate of soda	2 drams
Borax	1 dram
Benzine	1 fl. ounce
Strong solution of ammonia	1 fl. ounce
Distilled water	1 pint

Boil the soap in the water and add the borax and soda, and, when quite cold, the ammonia and benzine. Shake well before using.

To Transfer Gold Leaf to Wood.—F. T. L. writes : "Please publish the formula of a solution used to transfer gold leaf to wood by heat. Our cigar box manufacturers use it in printing boxes. They coat the wood with the solution and let it dry. It only becomes sticky or gummy upon the addition of heat at the time of transferring the gold."

Wood which is neither too hard nor too soft may be lettered as follows : The surface must be smoothed. Size by rubbing over a little flour paste, wipe off the paste so that only a trace remains. Then apply glaire (white of egg with a little water added), cover the surface thoroughly, rubbing in with a brush if necessary. Allow the glaire to dry thoroughly then apply the gold leaf. Have the brass stamp or the type hot enough to hiss when touched with a wet sponge. Press the type firmly into the wood. Remove the gold not secured by the heated die or type with a wet sponge rubber ; our correspondent is hardly correct when he calls it "transferring." There is a great knack in applying gold leaf properly, especially in taking the waste with a rubber.

Wall Paper Cleaner. M. B.—We do not know the composition of the "Magic Wall Paper Cleaner." If not very dirty the paper of any room will be much improved by brushing it over in straight lines with a soft broom covered with a clean, soft cloth ; if, however, the paper be much soiled, very stale bread is the best thing to clean it with. Cut a very stale loaf into slices, and in the lightest manner possible wipe the paper with it in a downward direction.

A compound much in vogue for cleaning wall paper is made as follows : Mix together one pound each of rye flour and white flour into a dough, which is partially cooked and the crust removed. To this 1 ounce of common salt and ½ ounce of powdered naphthaline are added, and finally 1 ounce of corn meal and ⅛ ounce of Venetian red or burnt umber. The composition is formed into a mass of the proper size, to be grasped by the hand, and in use it should be drawn in one direction over the surface to be cleaned.

Liquid Bluing. C. L. M. & Co.—We published desirable formulas for liquid bluing in our issue of April 12 (page 193). The bluing most commonly employed is made by dissolving Prussian blue in a weak solution of oxalic acid, say 6 drams of Prussian blue and 2 drams of oxalic acid to 1 pint of water.

Chewing Gum. F. L. M.—The chewing gums in greatest vogue have chicle for a base. We published a reference to the manufacture of chewing gums from chicle in our issue of September 8, 1893, page 199. The "Scientific American Cyclopedia of Receipts" gives the following formula :

Balsam tolu	4 ounces
White resin	16 ounces
Sheep suet	1½ ounces

Melt the above ingredients and take

Of the mixture	2 ounces
White sugar	1 ounce
Oatmeal	3 ounces

Soften and mix on a water bath. Roll the pieces in finely powdered sugar or flour to form sticks, etc., as desired.

Quiz Box.

This series of questions will be continued each week. The answers to each series of questions will appear thein issue for the fourth week following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published each week.

Address Editor Quiz Box, 37 College place, New York.

First Prize.—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the *entire* series of questions as published from March 22 to June 28, 1894.

Second Prize.—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

Third Prize.—A copy of Heebner's Manual of Pharmacy and Pharmaceutical Chemistry will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

Fourth Prize.—A copy of Lloyd's "Elixirs" will be awarded to every person who sends in an answer to *every one* of the questions published in the series, making an average of 66 per cent.

Answers to Questions ; Seventh Series.

81. Desiccation indicates the act of making dry ; the removal of the watery portion of a substance by chemical means or by the use of air and heat. It generally has reference to the removal of water not chemically combined. Most vegetable drugs are prepared and preserved by desiccation ; stramonium leaves and root of hydrastis.

82 Exsiccation, in meaning and ordinary use, does not differ essentially from desiccation ; they both indicate the removal of moisture but, as a rule, exsiccation has reference to a more energetic method of accomplishing the result, such as higher temperature, etc. Thus, exsiccated alum and exsiccated ferrous sulphate are prepared by heating the respective chemicals to a temperature of about 300°, thus expelling the water of crystallization. It would be better to restrict the use of the term exsiccation to indicate this effect.

83. Fusion. The act of melting, or the state of being melted, by heat. Thus, when phosphate of ammo. and soda is gently heated it melts in its own water of crystallization ; this is *aqueous* fusion ; if further and strongly heated, after all water has been liberated, it melts to a clear glass ; this is *igneous* fusion.

84. The element oxygen combines with all the other elements except fluorine, and this combination with an element or group of elements is called oxidation. We oxidize the ethyl of ethylic alcohol (common alcohol) by the use of sulphuric acid and obtain the oxide of ethyl, incorrectly called sulphuric ether.

Sulphur, when burned, oxidizes to sulphur dioxide ; this oxide, dissolved in water, yields sulphurous acid.

85. Vaporize alcohol or water and condense the vapor ; the product will still be what we started with, alcohol or water. In other words we have not destroyed the compound by distilling it. If, however, we attempt to distill wood, resin or coal we shall obtain a series of products, some gaseous, some liquid, and others solid, but there will be no wood, resin, or coal remaining, and by no possible process can we ever recover the substances we started with. This breaking up of an organic body into new compounds by heat, is called destructive distillation. Thus, when wood is heated to redness in an iron retort, water, tar, naphtha, pyroligneous acid, gases, etc., distill over, charcoal remaining in the retort.

86. Sublimation is the process of volatilizing solid substances, and again condensing them to the solid form, unchanged chemically. Thus sulphur, camphor, iodine and corrosive sublimate are separated from their impurities by heating the mixture containing them and condensing their vapors as they are given off.

87. Lixiviation. The process of dissolving out or extracting the saline matter of bodies by means of digestion in water. When the ashes of plants are percolated with or steeped in water or other solvents the soluble portions are dissolved and the solution thus obtained may, by evaporation, be made to yield the dissolved matter. In olden times the lye used for

soap making was thus obtained by the percolation of wood ashes. If this lye is evaporated and the residue heated to fusion we obtain the crude potash of commerce. Among the medicinal chemicals obtained by lixiviation are potassium carbonate from the ash of land plants and iodine from the ash of salt water plants.

88. When a solid is broken up into particles of different size and placed in a liquid the largest particles first settle to the bottom and the smallest particles are last to sink. By pouring off the liquid at different intervals we can thus separate the material into many different grades of fineness. If the material is a mixture of substances having different specific gravities (a mixture of powdered chalk and powdered flint) we may also employ this method to separate one of the substances from the other. This method of purifying and separating is called elutriation and is called into use in making whiting and prepared chalk.

89. Triturate means to rub or grind to powder. We triturate by the rotary motion of the pestle in the mortar, but if we lift the pestle and bring it down forcibly upon the contents of the mortar it is not trituration but contusion. We triturate the various constituents together in making Dover's powder and the various tablet and other triturates.

90. Contusion, like trituration, may produce powders, but the result is accomplished by a series of blows or pressures. Contusion is more generally resorted to as a preliminary to trituration or in softening a tissue to render it more capable of being acted upon by liquids. In making decoctions and infusions of firm tissues, wood, bark, roots, etc., we very often bruise or contuse the material before applying the liquid, as in making infusion of senega and compound decoction of sarsaparilla.

Names of Students Whose Grade Stood 75 on the Seventh Series.

W. J. Adams, Manchester. E. Q. Anewalt, Philadelphia.

E. O. Bailey, Bloomington, Ill. James Banks, Mifflintown, Pa. H. J. Barber, Alton, Ontario, Canada. G. W. Barksdale, Richmond, Va. J. C. Boyer, Wiconisco, Pa. W. E Bruce, Boston, Mass. T. M. Broadus, Gordonsville, Va. William Brown, New York City. T. H. Brenneman, Harrisonburg, Va. Roscoe Brown, Oxford, Pa.

Miss Maude Florence Cain, Lancaster, Pa. Andrew Campbell, Williamsport, Pa. Chas. L. Chapple, Minneapolis, Minn.

J. C. Dague, Fredericktown, Ohio. F. L. Dolan, Freeman, Mo. W. H. DeCamp. Mount Morris, N. Y. T. J. Derrberry, Centreville, Tenn. Edward F. Deen, Lancaster, Pa.

H. J. Force, Newark, N. J.

William E. Gokay, Bennington, Vermont. Max A. Goltz, Winona, Minn. Henry E. Garthoffner, Booneville, Mo.

Frank Hartmann, Middletown, Conn. Frank L. Harwood, Warren, Mass. Walter Hegeman, Rhinebeck, N. Y. Seymour Hull, Hoosick Falls, N. Y. G. C. Hodges, Utica, N. Y. Chas. W. Hyde, Sharon, Pa.

A. M. Leine, Honesdale, Pa. Jno. Lohmann, Jr., Edwardsville, Pa. Nicholas N. Lawery, Schenectady, N.Y. Henry Lampard, Montreal, Canada. H. G. Lavalle, Gouverneur, N Y.

C. J. McCloskey, Jersey City, N. J. John F. Marr, Chillicothe, Ohio. F. H Mayo, Mulhall, Pa. F. L. Mills, Boston, Mass. Thomas W. Murphy, East Bradey, Pa John R. Murray, Centreville, Tenn. W. B. Nethery, Toronto Junction, Ont.

Edward L. Page, Lancaster, Pa. P. H. Peters, Henderson, Mich J. H. Pratt, Birmingham, Ala.

A. V. Rand, Wolfville, N. S. M. E. Read, Wauseon, Ohio.

Aber Y. Smith, Clarksburg, W. Va. Clarence O. Snavely, Lebanon, Pa. Moses W. Somers, Boston, Mass. J. McDonald Scott, Chicago, Ill. S. M. T., Albany. W. E. Smurl, Parsons, Pa. W. A. Sickel, Snow Shoe, Pa. W. W. Scott, Highland Falls, N. Y. W. Scallin, Mitchell, S. Oak.

Lou Taylor, Greenfell, N. W. T. Howard B. Thomas, Syracuse, N. Y. J.W. Thomas, Jr., Norfolk, Va. Walter L. Tichenor, Brooklyn.

W. H. Van Strander, Winsted, Conn.

Bertie Ward, Orange, N. J. Miss Emma A. Wiggin, Exeter, N. H. Wood Wiles, Bloomington, Ind. H. A. Woodward, Plainfield, N. J. Frank M. Wayne Rochester, N. Y.

Questions; Tenth Series.

METROLOGY.

References: Oldberg's "Weights, Measures and Specific Gravity." Remington's Pharmacy, Heebner's Manual of Pharmacy, Oldberg's Home Study of Pharmacy.

111. What is the basis for the metric system, how was it derived and when and how determined?

112. Name the different units of the metric system and give their relation to those in general use in this country.

113. What is the relation of the imperial pint to the liter?

114. How should formulas which direct "parts" be understood; give a practical illustration.

115. How much would 13 fluid ounces of chloroform weigh in grammes?

116. How many minims would 75 grains of an equal mixture of glycerin and alcohol make?

117. How many fluid ounces of alcohol are contained in a kilogramme?

118. How much does a Winchester quart contain?

119. Give the interior dimensions for a cubical vat to contain fifty gallons

120 How much would 5 pounds (avoirdupois) of a mixture of equal parts of ether and glycerin measure?

Business.

Under this head will be conducted a department on the promotion of the business interests of the retail druggists in all their aspects, including that of advertising.

Our readers are invited to offer suggestions, to submit specimens of advertisements and to send inquiries on any points in which they are interested.

Written for the American Druggist and Pharmaceutical Record.

Advertising Circulars.

BY WALTER S. MURPHY.

The pharmacist is deluged by advertising matter free of charge. Every year he receives two or three packing cases full of almanacs made up of fulsome laudations of some patent medicine of whose virtues and composition he knows nothing whatever. He is allowed, however, to distribute this advertising matter without any prospective return for his labors other than that of the privilege of selling for 69c. an article that costs him 66⅔c. plus the freight.

This thing was started years ago when the pharmacist could make a good profit on sales of the nostrums so advertised; when the price had not been cut into by the cutters of all kinds either in or out of the drug business. Now that the practice of cutting has become so general, however, the margin of profit which can be depended upon in these sales is so small that it is not sufficient to remunerate the pharmacist for the trouble of distributing the advertising matter.

In considering this question it will be observed that it is dealt with wholly from a commercial standpoint. From an ethical standpoint also it is very readily apparent that the pharmacist should not lend himself to advertising something of which he knows nothing, as he thus practically indorses the article by sending out an advertisement of it with his name attached.

The question of newspaper advertising has occupied the major portion of the attention of the writers in your most valuable series, but I think that in many cases the use of circulars is very much more remunerative than is ordinary newspaper advertising. One of the difficulties contended with by the druggist in those sections in which circular advertising is the most valuable is the lack of good typographical facilities. When Polonius said to Laertes;

> Costly your habits as your purse can buy,
> But not expressed in fancy, for the dress oft bespeaks the man,

he showed a profound insight into the character of mankind.

The externals in advertising are the dress, and the patron is prone to judge of the character of the advertiser by the nature of the advertisement which meets his eye. A country friend of mine sent me some time ago some very well worded circulars which he had found to prove valuable for advertising some of his own preparations in a Pennsylvania town of 3,000 inhabitants. While the matter in these circulars was good the manner of their printing was decidedly poor. The mere fact that good results had followed their distribution did not by any means indicate that the matter of display and the presswork was of no importance, for I am convinced from my own experience that the same matter presented in a more elegant form would have produced much more satisfactory results.

I find that a fair quality of paper, good display and artistic presswork are very good investments, although they cost considerably more than work that is cheap both in price and quality. A New York friend of mine issues for his own business a little monthly paper, the reading matter of which is such as would interest the entire family. He secures enough advertisements from others who are in his immediate vicinity in lines that do not compete with his own to very much lessen the cost of the advertisement to him, and has come to firmly believe in periodical advertising in this manner.

While from my standpoint this periodical is really a circular, it has not that cheap air about it which pervades a single sheet, and it is of a character which insures its preservation. The items in it interesting one person causes him to hand it to another and in this way reach a much larger number of readers than a mere single page circular would.

Some Specimen Circulars.

We are in receipt from time to time of numerous circulars which show that many retail druggists appreciate as much as does Mr. Murphy the necessity of care in the preparation and printing of their circulars. Some of the most attractive circulars that we receive are those of Richard H. Lackey, of Philadelphia. It is his custom to celebrate the anniversary of his coming into possession of the store. On this occasion he decorates the store handsomely, distributes appropriate souvenirs and precedes this by sending out very handsomely printed circulars, and an example of the general style of these is given on another column.

This circular is printed on paper of very high finish, the outside measurement of the page being 3¾ x 6 inches and the actual type measurement being 1¾ x 4 inches. In reproducing to suit our columns we have lost much of the excellent effect of the original.

Another enterprising advertiser is Mr. Rowliniski, of Savannah, who sends out to each physician of the city a little circular under the title of "The Prescription." The original is printed on the front of a four

page sheet of fine Irish linen paper of note size. In it attention is called to various articles intended for prescription purposes.

(1st Page.)

FIVE YEARS *at Lehigh Avenue and Fifth Street*

Wooden Anniversary

OF

LACKEY'S PHARMACY.

(2d Page.)

IN accordance with our custom we will celebrate our

ANNIVERSARY

On Friday and Saturday,

November 17th and 18th.

. . . . *In appreciation of the many favors and kindnesses of our friends we will, as usual, distribute appropriate Souvenirs of the occasion to the Ladies and Children, and decorate the*

(3d Page.)

Store for the event. We hope all our friends will make an effort to come and feel at home, without being called upon to buy.

Thanking you for your patronage of the past five years, and hoping to retain a continuance of the same, I remain,

Very Respectfully,

RICHARD H. LACKEY.

(4th Page.)

1888 1893

Another very enterprising firm are H. H. Hay & Son of Portland, Me., who have, as many of our readers will remember, a three cornered store. They have issued a cardboard folder, which, when folded, is just the shape of their store. In one corner of this they have the legend "A well equipped prescription counter here," in an other "Toilet requisites and perfumes here," and in the third "A thirst-slaking soda fountain here." The title of the folder is "Contents of a three-cornered store."

PRESCRIPTION DEPARTMENT.

To this, the primary function of any pharmacy, the filling of physicians' commands, we devote our greatest energy. In any line there is a "good enough sort" of material, then there is a selected, superior grade. This better grade we strive to furnish. We have all the little helps for the sick room that make lighter that discomfort. 1st CORNER BEST IS NONE TOO GOOD

TOILET ACCESSORIES

Are quite as essential for the preservation of health as medicine for the sick. We have about all that is desirable in the way of Brushes, Combs, Sponges, Soaps, Toilet Waters, Perfumes, Tourists' Comforts and Manicure Goods. A line of Standard Family Remedies for Seashore or Mountains. 2nd CORNER "PREVENTION BETTER THAN CURE"

SODA

With sound, ripe fruit as its flavor, fresh, rich cream, all well iced, furnishes a beverage alike palatable and healthful. Such is our Soda, served in some forty flavors. 3rd CORNER AS A PALATABLE LUXURY

PHOTOGRAPHIC SUPPLIES

Also furnish a feature of interest to many nowadays. We have the plates, paper, chemicals, cameras, and, in fact, about everything you will need, including any information we are able to impart for your benefit. BETWEEN THE SOUVENIRS OF SUMMER CORNERS AND ELSEWHERE

PAINTS

For your summer cottage, boats or carriages are also part of our stock.

∴ ∴ ∴

We can supply you equally well by mail and express from any of our departments (Soda Water excepted) if you are not in easy access to our store.

∴ ∴ ∴

High grade and low prices tell the story.

Inside of the folder the several departments are described as follows, the whole following the outline of the card, the heavy-faced side headings being clear of the body of the type in the margin: The blank cover of the folder is under the heading "Outside of the three corners of Hay's pharmacy these places may be of interest," are given the names of a number of places in the vicinity and their distance in miles.

We trust that the mention of these circulars will prove of assistance to our readers and that others who have devised what have proven to be profitable advertising circulars will send us specimens for future reference.

A New York Section of the Society of Chemical Industry.

In furtherance of the proposition to establish a New York section of the Society of Chemical Industry, a meeting of the resident members was held at the New York College of Pharmacy on Tuesday evening, May 15. Many were present and signed a petition to the council requesting permision to form a local section.

Below is a list of the members resident in and around New York City:

LOCAL MEMBERS OF THE SOCIETY OF CHEMICAL INDUSTRY.

Adriance, John S., 231 Broadway, N. Y. City.
Archbold, Dr. George, 121–123 Front street, N. Y. City.
Austen, Prof. Peter T., 876 President street, Brooklyn, N. Y.
Alsberg, W., P. O. Box 2437, N. Y. City.
Banks John H., 104 John street, N. Y. City.
Bell, Percy Carter, 13 Park row, N. Y. City.
Benjamin, Dr. M., c-o D. Appleton & Co., 1 Bond street, N. Y. City.
Brenemann, Dr. A. A., 97 Water street, N. Y. City.
Briggs, T. Lynton, 357 Madison street, Brooklyn, N. Y.
Bruckmann, G. T., 192 18th street, Brooklyn, N. Y.
Campbell, John, 118 Warren street, N. Y. City.
Cawley, J. 278 Passaic street, Newark, N. J.
Church, Elihu D., Jun., c-o Church & Co., 36 Ash street, Brooklyn, N. Y.
Chandler, Dr. C., School of Mines, Columbia College, N. Y. City.
Clark, Franklyn S., 527 Madison avenue, N. Y. City.
Cogswell, W. B., Syracuse, N. Y.
Comer, H. 1 Broadway, N. Y. City.
Crumbie, W. D., 146 Washington street, East Orange, N. J.
Davis, Herbert J., 255 West 71st street, N. Y. City.
Dickerson, E. N., 15 Wall street, N. Y. City.
Dittrich, Julius C., Ozone Mfg. Co., 47 Liberty street, N. Y. City.
Elliott, Dr. A. H., Consolidated Gas Co., 4 Irving place, N. Y. City.
Endemann, Dr. H., 25–27 William street, N. Y. City.
Fries, Dr. Harold H., 92 Reade street, N. Y. City.
Geisler, Dr. Joseph F., N.Y. Mercantile Exchange, 6 Harrison street, N. Y. City.
Glatz, Jos., Riverside Chemical Works, 485–493 Kent avenue, Brooklyn, N. Y.
Goldschmidt, Dr. S. A., 43–51 Sedgwick street, Brooklyn, N. Y.
Habirshaw, W. M., 159 Front street, N. Y. City.
Harmon, L. E., c-o E. Ellsworth & Co., 71 Park place, N. Y. City.
Hartford, Jas., 3 Cedar street, N. Y. City.
Hartley, Edw., 62 Wall street, N. Y. City.
Hinman, Bertrand C., c-o Ironclad Mfg. Co., 186 Cook street, Brooklyn, N. Y.
Hunt, F. F., 77 Pine street, N. Y. City.
Johnston, W. A., The S. S. White Dental Co., Princess Bay, N. Y.
Klipstein, A., 191 Pearl street, N. Y. City.
Krause, O. H., Box L, Jersey City, N. J.
Lassing, H., M. D., 19 Park Place, N. Y. City.
Lineff, A. L., 51 Tribune Building, N. Y. City.
Love, Dr. E. G., 80 East 55th street, N. Y. City.
McGeorge, A. J., 205 West 78th street, N. Y. City.
McKesson, John, 91 Fulton street, N. Y. City.
Mason, A. H., Seabury Building, 59–61 Maiden lane, N. Y. City.
Marks, E. G., Belleville, N. J.
Matheson, W. J., 178 Front street, N. Y. City.
Molineux, Roland, 6 Jersey street, Newark, N. J.
Morgan, Albert J., 439 West street, N. Y. City.
Nichols, W. H., 45–47 Cedar street, N. Y. City.
Norris, Wm. M., Princeton, N. J.
Paine, Augustus G., 60 Times Building, N. Y. City.
Perkins, T. S., 39 Garden place, Brooklyn, N. Y.
Redwood, J. J., 104 Kent street, Brooklyn, N. Y.
Riker, Jno. J., 45 Cedar street, N. Y City.
Rueff, Emil, 426–436 East 19th street, N. Y. City.
Schleicher, Francis J., 250 Van Alst avenue, Long Island City, L. I.
Schupphaus, Dr. Robert C., 118 Pennsylvania avenue, Brooklyn, N. Y.
Schweitzer, Dr. H., 159 Front street, N.Y. City.
Simonds, Dr. F. M., 128 Sanford avenue, Flushing, L. I.
Smith, Francis P., U. S. Navy Yard, N. Y.
Stebbins, J. H., 114 Pearl street, N. Y. City.
Stevens, John H., The Celluloid Co., Newark, N. J.
Stillman, Dr. T. B., Stevens Institute of Technology, Hoboken, N. J.
Stillwell, C. M., Stillwell & Gladding, Box 1261, N. Y.
Vandenberg, Dr. Horace C., School of Mines, Columbia College, N. Y. City.
Vulté, Harmon S., School of Mines, Columbia College, N. Y. City.
Wainwright, Dr. J H., 22 West 46th street, N. Y. City.
Waller, F. T., School of Mines, Columbia College, N. Y. City.
Williams, Seward W., 8 Brighton avenue, East Orange, N. J.
Wing, Jno. D., Box 52, N. Y.
Witthaus, Dr. R. A., 118 West 55th street, N. Y. City.
Woodcock, R. C., 636 West 55th street, N. Y. City.
Woodman Durand, 80 Beaver street, N. Y. City.
Wyatt, Dr. Francis, 12 Park place, N. Y. City.

Interstate League.

The regular fortnightly meeting of the New York County Branch of the Interstate Retail Druggists' League took place in the Mott Memorial Hall, this city, on Friday, May 17. President Osmun took the chair and opened the meeting at 4 P.M. Secretary Morrison being absent, A. C. Searles was requested to act as secretary *pro tem.*

There was a fair attendance of members present and considerable interest was taken in the proceedings. The president read a letter from Julian B. Schope, attorney for the Chesebrough Manufacturing Co., in which it was represented that he had been successful in securing the indorsement of the German Apothecary Societies of New York and Brooklyn to the Chesebrough Co.'s action in proceeding against druggists whom the company had charged with fraudulent substitution.

The attorney himself was present, and although uninvited followed the communication with a speech. He was very

bitter in his denunciation of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD and attempted to create the impression that an injustice had been done to him.

He was interrupted during the progress of his speech by requests for explanations as to the relation which the Chesebrough Mfg. Co. bore to the Standard Oil Co. and as to whether the Chesebrough Mfg. Co. (Consolidated) was not simply a branch of the great monopoly known as the Standard Oil Company. To this he made a general denial. A representative of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD arose at this point and begged the president's permission to ask the attorney a specific question. He said he represented some twelve or thirteen thousand of the druggists of this country, and felt it would be necessary before taking cognizance of the attorney's remarks to know just exactly whom the attorney represented and whom he was authorized to speak for. The attorney replied "The Chesebrough Manufacturing Co."

A. C Searles asked if the company had always recognized the retail druggists as the legitimate distributing agents for vaseline and was answered in the affirmative. Mr. Searles said he hadalways understood differently. It was his impression that the Chesebrough Company preferred that their goods should be handled by the dry goods trade. The attorney then intimated that the Chesebrough Mfg. Co. was not to blame for this impression, as they did not deal with the consumer di rect, but were obliged by contract to distribute their goods through Colgate & Co.

The attorney having denied the charge that his agents had attempted in many cases to confuse the seller by the form in which requests for supplies were put, T B. Breen related a case which had come under his own observation where an agent of the company had persisted in calling for "A bottle of that 5 cent vaseline in the window" when he was fully aware that the substance on display was not the proprietary article.

Mr. Breen was followed by others who spoke in the same strain, giving instances of the manner in which the Chesebrough Co.'s agents had attempted to force them into substituting.

Victor Kostka said the attorney for the Chesebrough Mfg. Co. had slightly misrepresented the action taken by the German Apothecary Society. He explained the society's reason for taking the action they did. and made it appear that it was out of fear of prosecution by the Chesebrough Co. Mr. Kostka was disappointed in not being able to bring the League round to his way of thinking and withdrew from the meeting.

Mr. Breen urged the League to take some action looking to an investigation into the claims of the Chesebrough Mfg. Co. as to its proprietary rights on certain synonyms of petrolatum. He had been informed by some one connected with the company that it was unlawful to use the words "Petroleum jelly" as a title for petrolatum, and he would like to have a definite decision in the matter. He was able and willing for his part to abolish vaseline from his store as he had no difficulty whatever in selling the official article.

Mr. Schope, the attorney for the Chesebrough Co., then requested permission to say a final word to the League. He begged the local branch to withdraw its former resolutions and considered the company entitled to this on the score that all proceedings against druggists had now been abandoned.

Mr. Weinman asked the League to take the same action as the German Apothecary Society had taken, but Mr. Rontey wanted to know "why the members should be asked *not* to commit murder;" as a proposition it would be equally sensible. Mr. Breen moved that the communication from the Chesebrough Mfg. Co. be tabled, and the motion was carried by acclamation. President Osmun then appointed a nominating committee to nominate the following officers for the ensuing year: One president, one vice-president, three directors, one secretary and one treasurer. The following committee were named: A. M. Rontey chairman; A. C. Searles, Adrian Fritz, T. B. Breen and J. M. Pringle.

Among the accessions to membership at this meeting were the following: Jos. Ostrewicz, R. A. Kirschmer, Paul F. Metz, C F. Booth, Chas. W. Rous, L. Gramman, J. J. Kayser, G. A. Cassebere, J. Rosenstoch.

Boston.

"Philanthropy for a bait, business afterward," seems to be the motto recently adopted by the managers of the Massachusetts General Hospital. The excuse given out for the course which they have seen fit to follow is that the income of the hospital was slightly decreased during the year just past, but even if this was a fact the step which they have taken seems to be an unjust one. However, this is where some of these managers had what to them was evidently a "happy thought," but which was not pervaded by a spirit of "live and let live." This was to establish a drug store for their "out patient" department, so the idea was immediately put into execution.

A dispensary has always been run for the needs of the patients in the hospital; recipes for other patients being dispensed by the different druggists of the city at the pleasure of the patient. The business of this new department which the hospital has established is of such huge proportions that a new and separate dispensary was deemed necessary, and it is presided over by three apothecaries. The dispensing is said to be done either carelessly, hurriedly or ignorantly, resulting in some inelegant pharmaceutical preparations. For instance, the writer was told of a salve obtained at this place consisting of sulphur, zinc oxide and other ingredients, the whole incorporated so poorly that even the patient criticised the preparation. Not content with dispensing to their own patients, instances have recently come to light where outsiders have gone to the dispensary and obtained medicines, though one of the managers has said that this would be stopped.

Obituary.

JOHN S. MOFFITT.

There was much regret expressed in the trade here at the death of John S. Moffitt, of the Moffitt-West Drug Co. of St. Louis, at the age of thirty-nine, which occurred at his home in that city on Friday morning at nine o'clock. Mr Moffitt had been in poor health for some time. His death was due to quick consumption

He was born in Pittsburg, Pa., July 7, 1854. He moved to St. Louis with his parents in 1856, to which place his father went to embark in the drug business with James Richardson. He acquired his early education in the public schools of St. Louis. The death of his father, when he was but fourteen years of age, left a large family that looked to the boy for support, Mr. Moffitt entered the employ of Richardson & Co. in the fall of 1868 as assistant in the laboratory.

So much interest did he manifest in his work and so rapidly did he become familiar with the details of the order department of the house his employers recognized the boy's worth and placed him in charge of the druggists' sundries department in 1874, when then but twenty years of age, and through his keen business foresight and good judgment the sales from this particular branch of their business had reached enormous figures at the time they were burned out on January 1, 1889.

Upon learning of the intentions of the Richardson Drug Company to retire from business he immediately organized the Moffitt West Drug Company, of which he was made the president and which position he continuously held to the time of his death, and which venture through his good management has increased from a small beginning until now it is recognized as one of the leading wholesale drug houses in the West.

Mr. Moffitt was a member of all the commercial bodies of St. Louis, and stood high in the councils of its citizens. He was a member of the Board of Control of the N. W. D. A, and was one of the commissioners of charitable institutions of St. Louis; he was a man of strong religious convictions and for several years was superintendent of one of the largest Sunday schools in St. Louis.

The Missouri Pharmaceutical Association is indebted to him for much of its success and especially its large membership. About six weeks ago, he began to realize that he was fast losing strength, and thought to recuperate by a trip to Eureka Springs, where he remained two weeks, but returned to St. Louis in a worse condition than when he left, since which time he rapidly lost ground. He leaves a wife and a charming daughter to mourn his loss besides numberless friends in the trade throughout the country.

Review of the Wholesale Market.

NEW YORK, May 23, 1894.

It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.

We are unable to report any improvement in the condition of the general market. The movement of stock as reported from day to day continues of limited proportions, there being no disposition manifested to operate in a quantity way. There is yet a noticeable absence of inquiry from interior correspondents, but it is believed that the coming month will bring to light many deficiencies that will have to be covered by fresh operations. Prices are maintained with a fair show of steadiness and we have few fluctuations to report. Opium continues weak, and the tendency is toward a lower range of values. Quinine is maintained firmly. Morphine comes lower from manufacturers. Norwegian cod-liver oil is less firm.

ADVANCED.	DECLINED.
Paris green.	Citric acid.
Mexican sarsaparilla.	Opium.
Coriander seed.	American saffron.

DRUGS.

ALCOHOL has not varied in any essential particular since the last report. The Trust managers are maintaining prices despite outside competition and the range is steady at $2.18 @ $2.22 as to quantity. The rebate system of the Trust is meeting with some vigorous opposition and it is claimed will have to be abandoned.

BALSAM COPAIBA of the better grades is scarce and prices are maintained firmly; importers ask 35 @ 38c. for Central American and 40 @ 42c. for Para. Jobbers, however, are looking for concessions from these figures.

BALSAM FIR has remained quiet with $3.20 @ $3.30 yet the asking price.

BALSAM PERU is in better receipt, but values are maintained firmly at the previous range of say $1 85 @ $1 90.

BARKS of all descriptions continue quiet with no changes of consequence to report.

CANTHARIDES, Russian, are reported higher abroad, but no change is reported in this market; the inquiry is confined to small jobbing parcels only.

COD LIVER OIL, Norwegian, continues quiet and prices show an upward tendency with 27 @ 28c. quoted regular.

CUBEB BERRIES meet with a fair amount of attention and values are sustained at the previous range.

CUTTLE BONE, Trieste, has been taken with some freedom during the week and among the sales reported we note a sale of 35 straps which went at a fraction below 9c. The range stands at 9½ @ 9¾c.

ERGOT continues in fair jobbing inquiry with the sales of German at 22 @ 24c. and Spanish 25 @ 27c.

DAMIANA LEAVES have developed no action of any consequence during the week and are meeting with rather limited attention. Numerous small sales are reported within the range of 12 @ 12½c.

INSECT POWDER is in good seasonable demand with the current sales within the range of 16 @ 22c.

MENTHOL is firmer and values are showing an upward tendency in view of strong cable advices from London; the lowest open value in this market is $4.75, and we quote the range at $4.75 @ $5.

MORPHINE has been reduced by the leading manufacturers to $2. in bulk, $2.05 in ounces and $2.25 @ $2.30 in eighths. Other brands are offered at a reduction of ten cents from these values.

OPIUM is to remain on the free list, at least it has been so decided in the Senate, though what action the lower House may take when the bill is returned there for consideration cannot be foretold. Many of the large dealers who had stocked up in anticipation of the imposition of the duty are considerably depressed over the turn affairs have taken. Late mail advices from Smyrna are to the effect that the steady rains in the latter part of April have had a very favorable effect upon the growing crops. Under the influence of this improvement in the crop prospects the Smyrna dealers are said to be very willing to take contracts even at a reduction from the ruling market quotations. Values in this market are now slightly above those prevailing elsewhere, but concessions upon the part of holders are looked for and a revision of prices is likely to be announced soon. Natural in case lots may now be obtained at $2.12½ @ $2.15 as to test, and it is a matter of comment that at these figures importers net no profit. For less quantities than cases the quotation of the market is $2.20 @ $2.22½. Powdered is quoted $3.10 @ $3.40 as to test and holder.

QUININE continues to be held with strength and firmness, and the market is well sustained upon the basis of 23 @ 23½c. for foreign brands. Domestic bulk is firmly maintained at manufacturers' quotations.

SAFFRON, American, has declined to 40 @ 42c. The approach of the new crop is responsible for the decline in the price of old.

SOAP, White Castile, Conti's, continues held at the range of 9⅝ @ 9¾c., the former figure being for goods to arrive.

TONKA BEANS continue in very strong position with the available quantity exceedingly small; Angostura held at $2 @ $2.15.

VANILLA BEANS are in more abundant stock, but prices are maintained steadily upon the basis of $6.15 @ $13 for whole and $5.25 @ $6 for cut.

DYESTUFFS.

BICHROMATE OF POTASH is lower, the price from manufacturers' hands being now 9¾c.

CUTCH of prime quality is scarce and firm at 5¾ @ 6c. and a moderate trade is doing at this range.

DIVI DIVI is scarce and firmer with sellers quoting 55 @ 65c.; in some instances an advance is asked upon these prices.

GAMBIER continues in good demand at former prices. We quote the range at 4 @ 4¾c for store goods and 3⅞ @ 3.90c.

INDIGO continues to meet with a steady fair inquiry and the market is firm upon the basis of 90c. @ $1 for low grade Bengal, $1.05 @ $1.20 for medium and $1.25 @ $1.50 for good to fine. Madras is held at 4½ @ 5c.

NUTGALLS, Blue Aleppo, remain very quiet and values are firm at the range of 13½ @ 14c.

SUMAC, Sicily, is in moderate demand and steady at $72 50 @ $77.50 as to brand and quantity.

CHEMICALS.

ARSENIC, White, is in fair request and firm at 3¾c.

BLEACHING POWDER is dull and featureless. We quote the range for English in casks at $2.25 @ $2.50.

BLUE VITRIOL continues inquired for, but the market is very lightly supplied and manufacturers appear to have little or no surplus. The price remains 3¾ @ 4c.

BORAX is developing an easier tendency and lower prices may be looked for as the consequence of the proposed reduction in duties.

BRIMSTONE, crude seconds, is given very little consideration. Spot quoted nominally $17 @ $17.50, and forward shipments $ 6.50.

CAUSTIC SODA is in better demand, with $2.60 @ $2.75 now quoted as the range for 70 and 75 per cent.

CHLORATE OF POTASH continues quiet but steady at 13⅝ @ 13¾c. for German, and 13⅞ @ 14c. for English.

CITRIC ACID remains quiet at the recent decline to 40½c., for bbls. and 41c. for kegs.

NITRATE OF SODA continues quiet; for quantity lots ex-ship $2.25 is asked and for small lots $2.30 is named as acceptable. Store price is $2.30 @ $2.35 as to quantity.

PARIS GREEN has been advanced by the manufacturers to 23 @ 29½c. as to style of package and quantity, the previous rebate being allowed.

SAL AMMONIAC, white grain, is higher in sympathy with the market abroad; sales of prime German have been made in a quantity way down to 6¾c., but 7c. is now asked in most instances.

QUICKSILVER continues in good jobbing demand and the price is well sustained at 49 @ 50c.

ESSENTIAL OILS.

ANISE is maintained at $1.50, at which quotation small parcels are taken by the trade.

CASSIA continues selling in small lots at 82½ @ 85c. as to quantity and quality.

CITRONELLA has been inquired for freely during the week and prices have advanced, holders now quoting 25c. as an inside value.

CUBEB is yet held at $1.45 @ $1.50, though the trade requirements at the moment are very moderate.

LEMON continues in fair demand and sales are making at 95c. @ $1.35 as to brand, the outside value for Sanderson's.

PEPPERMINT HGH reflects no change from recent reports. Small export orders are in the market at a limit of $2 80, but there appears to be nothing obtainable at this figure. Bulk remains $2.30 @ $2.60 as to quality.

GUMS.

ARABIC and Senegal have been given more attention with sales reported of a hundred packages of the various kinds within the range of our quotation.

CAMPHOR is selling quite freely at the range of 26 @ 28c.. but no sales of consequence are reported.

CHICLE offers at 26 @ 28c., though no sales of consequence are reported.

KINO is firm at $1.20, but there is only a limited demand at the moment.

SHELLAC is dull and prices are nominal. DC is held at 34 @ 35c.; VSO 33c.; Diamond I 30c. and SS 29c.

ROOTS.

ACONITE is firmly held at 12c. for German and the distribution is of average proportions.

DANDELION is maintained 7½ @ 8c. for German and the available supply is small.

IPECAC continues very dull though the quotations remain $1.25 @ $1 40 as to quality.

JALAP is dull, but the market continues firm upon the basis of 20 @ 21c.

GENTIAN does not vary from 3½ @ 4c. and numerous small sales are reported at this range.

GINSENG is yet quoted $2.35 @ $3, but lower values are anticipated soon.

GOLDEN SEAL is scarce and quoted 21c. as an inside price.

SARSAPARILLA, Mexican, is higher owing to scarcity; 9c. is now asked by the principal holder.

SENEGA has been in good request and among other transactions we are reported a sale of 25,000 lbs. at 38½c.

SNAKE, Texas, is jobbing fairly at 30c.

SEEDS.

ANISE does not vary from 8½ @ 10c. for new Italian, but the demand is of small proportions.

CANARY, Smyrna, is in liberal stock and more freely offered; purchases can now be made down to 2¼c.

CARAWAY, Dutch, is quoted 6¼ @ 6⅜c., though little inquiry is reported.

CELERY continues dull; limited quantities can now be obtained at 16½c.

CORIANDER is scarce and firm at 18½c.

HEMP, Russian, is firmer though not quotably higher; purchases can yet be made at 2¼c.

RAPE, German, is quoted 2¾ @ 2⅞c. with small sales within the range.

MUSTARD is firm though the demand at the moment is limited. Yellow quoted 4c. and brown 3¾c.

Approaching Pharmaceutical Meetings.

MAY 29.

The Kansas Association meets at Salina. Local secretary, Emil Arner.

JUNE 5.

The Arkansas Association meets at Hot Springs. Secretary, J. W. Beidelman, Little Rock.

The Ohio Association meets at Cincinnati. Local secretary, A. Wetterstroem.

The Utah Association meets at Provo. Secretary, C. H. McCoy, Salt Lake City.

JUNE 12.

The Minnesota Association meets at Lake Minnetonka. Secretary, C. T. Heller, St. Paul.

The Missouri Association meets at Excelsior Springs. Local secretary, C. L. Cowens.

The Pennsylvania Association meets at Neversink Mountain House. Local secretary, J. B. Raser, Reading.

JUNE 13.

Indiana Association meets at Evansville. Local secretary, George W. Haynie.

JUNE 26.

The New York Association meets at Saratoga. Local secretary, C. F. Fish.

JULY 10.

The Virginia Association meets at Blue Ridge Springs. Local secretary, W. B. Spickard.

The American Pharmaceutical Association Meeting.

The A. P. A. could not have selected a better place than Asheville, N. C., for holding their forty-second annual convention. "Girt round with rugged mountains," the "Queen City" of the "Land of the Sky," is without a peer either in this country or abroad, and of all the twelve months of the year September is the one we would choose for a visit to Asheville.

Asheville is situated in the heart of the "Blue Ridge Mountains" in the extreme western section of North Carolina. It is this section that Christian Reid, Charles Egbert Craddock, Francis Hodgson Burnett and Bill Nye have made famous by their writings, and one cannot but wonder that the grand and the beautiful, ever present among these majestic hills, did not inspire them to greater efforts. Climatic conditions are at the best in Asheville. The nights are cool and the days never uncomfortably warm. Hotel service is unsurpassed; the Battery Park, Swannanoa, Berkeley, Oakland Heights and Kenilworth Inn are all first-class hotels, conducted in the most approved style. Electric car lines reach all parts of the city and a dummy railroad conveys the sightseer to the top of Sunset Mountain, a commanding elevation 1,200 feet above the town.

Asheville is easy of access from all parts of the United States. It is reached via the Richmond & Danville Railroad from four points. From Salisbury on the main line of the Richmond & Danville the Western North Carolina Road taps Asheville on the east. On the south the Asheville & Spartanburg Road connects with the main line at Spartanburg. On the west the Murphy division of the Western North Carolina Road reaches Murphy, the terminus of the Marietta & North Georgia Road, and on the north the W. N. C. Road connects with the East Tennessee, Viginia & Georgia system at Paint Rock.

Asheville is 20 hours from New York, 16 hours from Baltimore, 24 hours from Chicago, 14 hours from Cincinnati, 14 hours from Jacksonville, 24 hours from New Orleans, 24 hours from St. Louis.

Finely appointed vestibuled trains on the Richmond & Danville systems carry through sleepers for Asheville, one from New York and one from Jacksonville; a through sleeper is also run between Asheville and Cincinnati.

The population is about 12,000, made up to a great extent of people from all over the United States, some living there on account of health and others for pleasure. Many beautiful residences adorn the principal streets and occupy picturesque sites on elevations commanding the city.

George Vanderbilt has selected Asheville as a place to build a magnificent palace for a country residence, eight thousand acres purchased by him at the confluence of the French Broad and Swannanoa Rivers, about one mile outside the city limits, is now being converted into an extensive park, and a residence is being erected which promises to surpass almost anything in this country. Four million dollars he has already expended in this work and it is estimated that six million will be necessary to carry out his present undertakings. A drive over his estate, and a view of the work in progress and contemplated, convinces one that it is the most elaborate undertaking in the pursuit of pleasure ever entered into by a citizen of the United States. From the commanding elevation upon which his residence is now in process of construction a grand panorama is spread out before you. The Black Mountains, where rises the beautiful Swannanoa, are to be seen to the northeast—Mount Mitchell, their highest peak, rising to a height of 6,700 feet above the level of the sea, and being the highest land east of the Rocky Mountains. To the west are Pisgah and the Balsams, to the south the Blue Ridge, and to the north Asheville and beyond the Smoky Mountains and Tennessee.

The members of the Gridiron Club of Washington, who were entertained in Asheville in November, were all warm in their praise of Asheville, but nothing so entranced them as the view from Vanderbilt's.

There are carriage drives without number in and about Asheville, those along the rivers being particularly beautiful. The city is well equipped in the way of carriages, and a careful driver can be easily procured for any drive one may desire.

As a health resort Asheville's reputation is world-wide. The dry air in that locality is favorable to those suffering with pulmonary troubles, and physicians from all over the United States send patients there invariably with beneficial results—that is if the patients are not past help when they get there.

Nat. S. Rogers, Secretary Citizens' Committee A. P. A. says: "We can only ask the members of the A. P. A. to come and see for themselves a country that nature has smiled upon, a country that is as beautiful in winter as in summer, and one whose people will welcome them with open arms, hoping that when after the convention has completed its work its attendants will carry away with them kind and pleasant recollections of Asheville and the "Land of the Sky."

For any further information apply to Whiteford G. Smith, Local Secretary, Asheville, N. C., or to the editor of this journal.

THE AMERICAN PHARMACEUTICAL ASSOCIATION MEETING.—VIEW NEAR ASHEVILLE, N. C.

The Massachusetts Meeting.

The president of the Massachusetts Association has issued the following circular:

EVERY PHARMACIST SHOULD READ THE FOLLOWING CAREFULLY, TWICE.

The next annual meeting of this Association will be held at Worcester, June 26, 27 and 28, 1894.

If you are not already a member we invite you to join us and be present at this meeting. All who have been benefited by the present "Local Organizations" (composing the Interstate league) should bear in mind that the Massachusetts State Pharmaceutical Association was the originator of this movement, and it is its committee on local organization, with such assistance as they have brought into action, that today are carrying on this work with so much promise of success in bringing the trade back to its old time prosperity.

At the last annual meeting of the association held at Nantasket Beach in June, 1893, it was voted to give every registered pharmacist in the State in good and regular standing, who shall apply for membership during the year 1893-4, a copy of the full proceedings of that meeting

printed in book form, which shall contain besides the usual valuable and instructive matter. A complete compilation of all the laws on the statute books of the State relating to pharmacy. This will be of inestimable value, and should of itself be a sufficient inducement to cause every pharmacist not already a member to send an application to the secretary at once. No initiation fee is charged; but the annual dues, $2, should accompany the application, which will pay for the year following the acceptance of some.

Send your application now while it is fresh in your mind.

J. ALLEN RICE, President.
M. L. H. Leavitt, Secretary.
65 Cambridge St., Boston.

Texas Association.

The fifteenth annual meeting of the Texas Pharmaceutical Association was called to order in the Board of Trade hall at Austin, on Tuesday morning, May 8, by President L. Myers Connor of Dallas.

In his opening address President Connor reviewed briefly the history of the organization since its inception in Dallas when he was the first president elected by it down to the present. He spoke with commendation and pride of the work of Dr. Rice and the pharmacopœia committee.

As to the pharmacy laws, he said:

We want a law that will compel every man who dispenses medicine to be thoroughly competent, and let the test of his ability be a rigid examination before an able board, regardless of any diploma he may be so fortunate as to possess from any college of pharmacy, for it must be conceded that careful counter training is just or more essential than the theoretical information which can possibly be obtained in a course of twice 16 weeks. The present laws for the protection of pharmacy, on the statute books of Texas, are the merest subterfuge and can not serve any good purpose to the people for whom it was evidently intended.

Sections 2 and 4 are particularly conflicting, and it is to be hoped that this association will, at the next meeting of the legislature, urge the committee on the same to work for such amendments as they deem proper, and have the bill presented early in the session, so that same may be reached in due time.

He recommended a vigorous and concerted movement toward interesting physicians in the preparations of the National Formulary. He recommended that the example of the Missouri Association in selecting a permanent meeting place be adopted.

Several delegates present were invited to take seats as members.

J. R. Carpenter of Webberville and Frank H. Raymond of Austin, and Chas. J. Boichert of Kyle, were elected members.

The reports of various committees and officers were read and adopted. Among them being the report of the committee on president's address approving the recommendation as to the selection of a permanent place of meeting.

After the formal opening on Wednesday morning applications for membership from the following were favorably acted upon:

Felix E. McKay of Temple, C. A. Taylor of Midland, John A. Campbell of Austin, Leland Douthit of Georgetown, W. L. Mann of Georgetown, L. S. Williams of Giddings, T. J. McDade of Waxachachie, J. J. Hoffstodard, and A. R. Bond of Austin.

The question of expense of entertainment was discussed but no action taken. The election of officers then followed and resulted in the choice of the following: H. L. Carleton of Austin, president; Geo. L. McKinstry of Sherman; George Schmidt of San Antonio, and W. F. Robertson of Gonzales, vice-presidents; George W. Heyer of Houston, secretary, and W. F. Shook of Dallas, secretary. In the absence of President-elect Carleton W. B. Morrison of Waco was selected as president *pro tem.*

G. H. Kalteyer of San Antonio offered a motion that the association present a gold medal to the first graduate from the pharmacy branch of the Texas University at Galveston, which was unanimously adopted. Dr. Kennedy of Galveston, who occupies the chair of pharmacy, returned thanks to the association for its appreciation of the efforts of the faculty, and assured it that every effort would be made to deserve it.

A resolution deprecating the practice of a few wholesalers selling to druggists who cut prices was adopted.

Galveston was unanimously selected for the next place of meeting of the association, and the convention adjourned until 2 P.M.

At the afternoon session W. B. Morrison of Waco was appointed by the president delegate to the American Pharmaceutical Association.

G. H. Walker of Gonzales was elected chaplain of the association.

At 3 P.M. an adjournment was taken and the association went out to the dam and enjoyed an excursion on the *Ben Hur*.

On convening Thursday morning President Carlton announced the following committee:

On Notes and Queries—R. H. Walker, G. L. McKinstry and H. C. Whitney.
Prizes—James Kennedy, W. B. Morrison and Oscar Jannasch.
On Adulterations—James Kennedy, E. Dreiss, R. H. Bingham, W. R. Neville, W. L. Mann and C. E. Wicker.
On Legislation—L. Myers Connor, J. L. Cunningham, W. A. Williamson, J. W. Graham.
On Medical Conference—J. Burgheim, R. Schweickhardt, W. B. Morrison.
Auditing Committee—G. H. Kalteyer, H. Behrens, J. A. Landrum.

The following papers were presented and discussed: "Pharmaceutical Education," by Dr. James Kennedy; "Warburg's Tincture," by Richard Schweickhardt of Dallas; "Masking Quinine" and "Preparation of Oleates," by Wm. R. Neville of Houston; Detannated Elixirs of Cinchona, of Gentian and of Wild Cherry," by A. E. Schaeffer of Houston.

A bill was presented at the last session of the legislature providing for a general State Board of Pharmacy instead of the numerous district boards as under the existing statute, and it also provides for an annual registration with payment of a fee of $1 each year.

The committee on prizes reported as follows:

We, the committee, appointed to examine the papers submitted to this association and to award the prizes offered, beg leave to report that they would recommend they be awarded as follows: Gold medal to A. E. Schaeffer of Houston, $25 to R. Schweickhardt of Dallas, diamond scarf pin to Wm. R. Neville of Houston. We also recommend that a vote of thanks be tendered Mr. R. R. De Cline of Houston for his able and interesting paper.

Resolutions commending the Department of Pharmacy of the University of Texas were passed.

Dr. James Kennedy was elected local secretary, and after passing the usual votes of thanks the convention adjourned to meet in Galveston next year.

Georgia Association.

The Georgia Pharmaceutical Association met in the Knights of Pythias hall in Americus on May 8. The nineteenth annual session was opened with prayer by Rev. Mr. Christian. The address of welcome was delivered by the Mayor and responded to by Dr. Goodwyn of Macon. Interesting papers were read by many members, among the number being Dr. Durban of Augusta.

President Cosby delivered an interesting address which was followed by a report of the committee on adulteration submitted by Dr. H. R. Slack, chairman of the committee.

Dr. John Goodwyn of Macon resigned the chairmanship of the Board of Pharmacy after four years of service and S. C. Durban of Augusta was chosen as his successor.

At the afternoon session the following officers were elected: President, Jno. P. Turner of Columbus; vice-presidents, G. W. Curry of Rome, R. C. Dickinson of Thomasville, and Lynn Fort of Americus; treasurer, M. H. Taylor of Macon, and secretary, H. H. Arrington of Summerville.

Papers were presented by John C. Turner, S. C. Durban, G. W. Goodwyn, Harry Sharpe and President Cosby.

Dr. F. Joergen made an address based on his experience with the yellow fever at Brunswick last summer.

A number of applications for membership were favorably acted upon.

At the morning session of the second day Professors Caspari and Oldberg were elected to honorary membership. The newly elected officers were installed and several interesting papers were read.

After much routine work, in the afternoon the association adjourned to meet in Savannah on May 21, 1895.

In the evening an elaborate banquet was tendered the visitors by the citizens of Americus.

Mississippi Association.

The association met in the Senate Chamber at Jackson, on May 8, at the call of President H. F. West.

The business transacted was mostly of a routine nature.

The following officers were elected: President, N. C. Mosby of Jackson; vice-presidents, John Hough of Magnolia, and R. R. Ledbetter of Jackson; secretary, Chris. H. Herbert of Jackson; treasurer, W. G. Barnes of Winona.

Following are the standing committees for the next year:

Executive Committee—J. C. Shotelle, Dr. Ellis and H. C. Price.
On Papers and Queries—J. P. Mayo, Carson Lemly, S. M. Dampeer, Geo. L. Moore and W. T. Matthews.
On Trade Interests—P. B. King, John Hughes, O. Lillybech, B. Lemly and C. H Clifton.
On Legislation—J. W. Eckford, A. G. Cassell, B. Lemly, H. F. West, Wade Harvey and G. S. Beall.
On Revision—L. A. Rather, J. R. Small and C. H. Herbert.
Delegates to the A. P. A.—J. W. Eckford, J. C. Means, H. F. West, J. C. Shotelle and Carson Lemly.

The association will meet next year at Winona.

Alabama Association.

The Alabama Pharmaceutical Association met on May 8 in the Knights of Pythias Hall, Anniston, with President E. P. Galt of Selma in the chair.

Mayor Hight welcomed the association and was responded to by Mr. Bingham of Tuskaloosa. After the reading of several papers the association adjourned till Wednesday morning.

On convening Wednesday morning the following officers were elected: President, E. P. Galt of Selma; vice-president, J. L. Wikle of Anniston; secretary, P. C. Candidus of Mobile; treasurer, E. E. Elam of Anniston. Montgomery was selected as the place of meeting for next year.

Executive Committee—M. F. Tucker, W. F. Punch, W. E. Bingham.
On Queries—W. B. Parker, S. H. Henderson, Dr. S. E. Winnemore.
On Adulterations—Chas. A. Mohr, J. C. Ruff, J. W. Milner.
On Commercial Interests—M. M. Stone, E. B. Norton, E. P. Amerine.
On Legislation—W. F. Dent, C. B. Goldthwaite, Dr. J. D. Humphrey.
Delegates to American Pharmaceutical Association—P. C. Candidus, E. P. Galt, E. E. Elam, S. H. Henderson, Dr. J. D. Humphrey.